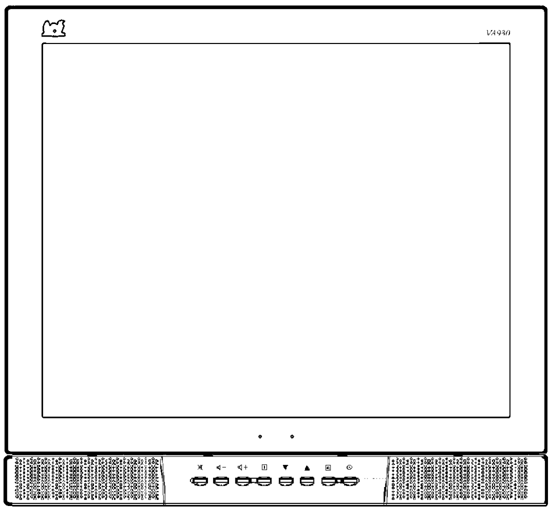
Service Manual

ViewSonic VA930-1

Model No. VLCDS24020-1W

19" Color TFT LCD Display



(VA930-1_SM_584-Rev. 1.0-September 2002)

ViewSonic® 381 Brea Canyon Road, Walnut, California 91789 USA - (800) 888-8583

Revision History

Revision	Date	Description Of Changes	Approval
1a	9/4/02	Initial Reversion DCN-2433	K.Yang
1b	11/05/02	Revise DCN-2433	C.Shen

TABLE OF CONTENTS

1. PRECAUTIONS AND NOTICES....................1
2. SPECIFICATIONS....................2
3. LOCATION OF CONTROLS....................3
4. ADJUSTING PROCEDURE....................4
5. BLOCK DIAGRAM....................9
6. TROUBLE SHOOTING FLOW CHART....................11
7. SPARE PARTS LIST....................15
8. EXPLODED DIAGRAM AND SPARE PARTS LIST....................26
9. SCHEMATIC DIAGRAMS....................28
10. PCB LAYOUT DIAGRAM....................38

1. PRECAUTIONS AND NOTICES

Prior to using this manual, please ensure that you have carefully followed all the procedures outlined in the user manual for this product.

Read all of these instructions.

Save these instructions for later use.

Follow all warnings and instructions marked on the product.

Do not use this product near water.

This display should be installed on a solid horizontal base.

When cleaning, use only a neutral detergent cleaner with a soft damp cloth. Do not spray with liquid or aerosol cleaners.

Do not expose this display to direct sunlight or heat. Hot air may cause damage to the cabinet and other parts.

Adequate ventilation must be maintained to ensure reliable and continued operation and to protect the display from overheating. Do not block ventilation slots and openings with objects or install the display in a place where ventilation may be hindered.

Do not install this display near a motor or transformer where strong magnetism is generated. Images on the display will become distorted and the color irregular.

Do not allow metal pieces or objects of any kind fall into the display from ventilation holes.

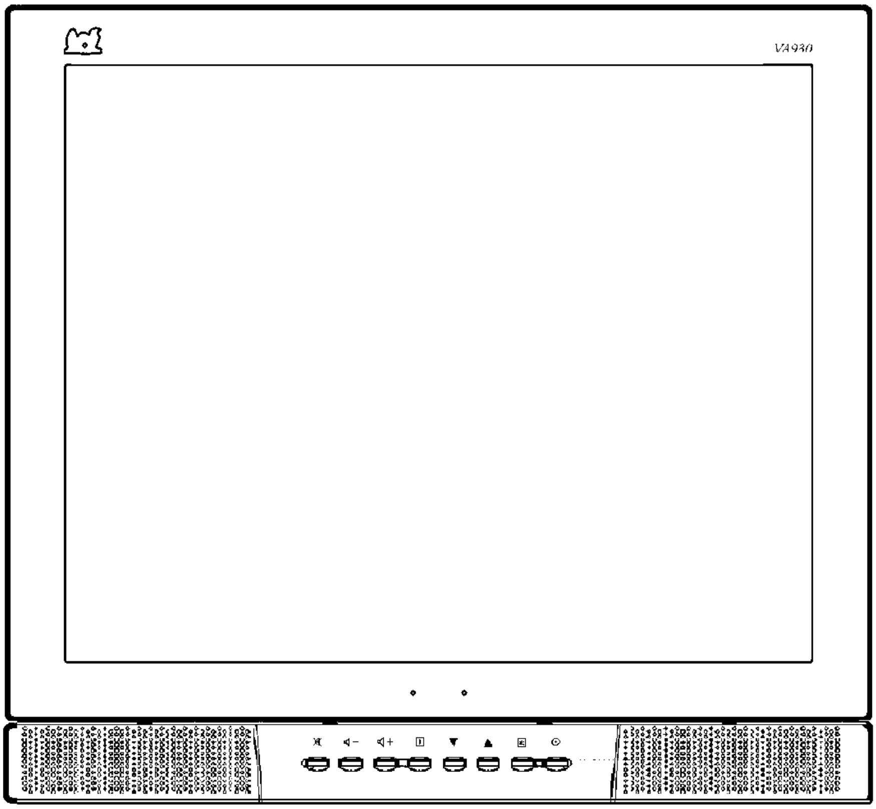
Slots and openings in the cabinet and the back or bottom are provided for ventilation, to ensure reliable operation of the product and to protect it from overheating, those openings must not be blocked or covered. Those openings should never be blocked by placing this product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.

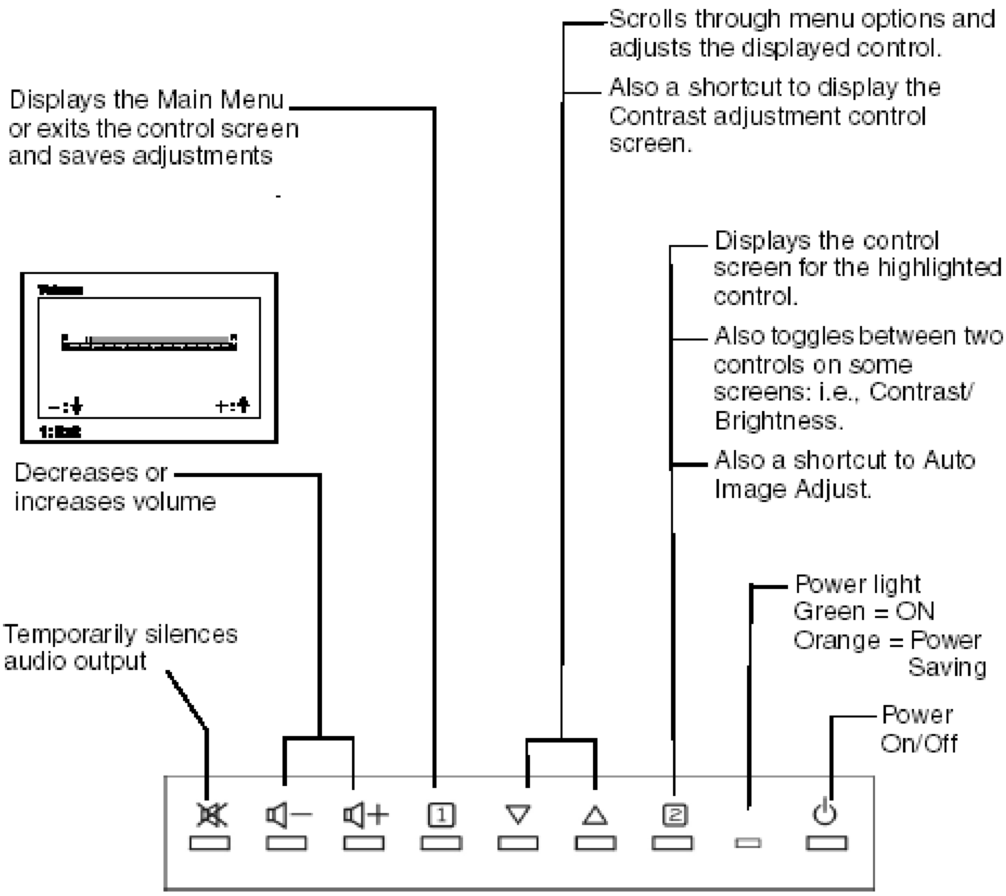
2. SPECIFICATIONS

1. Specifications

LCD panel type	19.0" TFT(Fujitsu)
Power Consumption	48 W (typ)
Displayable Resolution	SXGA 1280 x 1024 maximum
Pixel dimension	0.294 mm x 0.294 mm
Display Color	16.7 M
Viewing Angle (CR=10)	Horizontal: ±85° Vertical: ±85°
Response Time	25 ms typ.
Contrast Ratio	500:1 typ.
Brightness	250 cd / m^2 typ.
Active Display Area	376 mm horizontal x 301mm vertical
AC/DC adapter	Input:AC 100~264V,47~63 Hz Output:+12V DC.
Dimensions (WxHxD)	439 mm(W) x 465mm(H) x 180mm(D)
Weight	7.5 kg (unit)
Input connector	15 Pin D-Sub.
Power management	YES
Temperature	Operating : 0°C ~ +40°C Storage : -20°C ~ +60°C

3. LOCATION OF CONTROLS





4. ADJUSTING PROCEDURE

The " adjusting procedure" of VA930 model

1. Turn off the display by power button key on the front of bezel,

2. Disconnect the DC power cable from power jack at rear side.

3. Press and hold the “▲” button key on the front of the bezel

4. Connect the power cable with power jack, and keep pressing the “▲” button key.

5. Press the power button key to turn the display on, and then release the “▲” and power button.

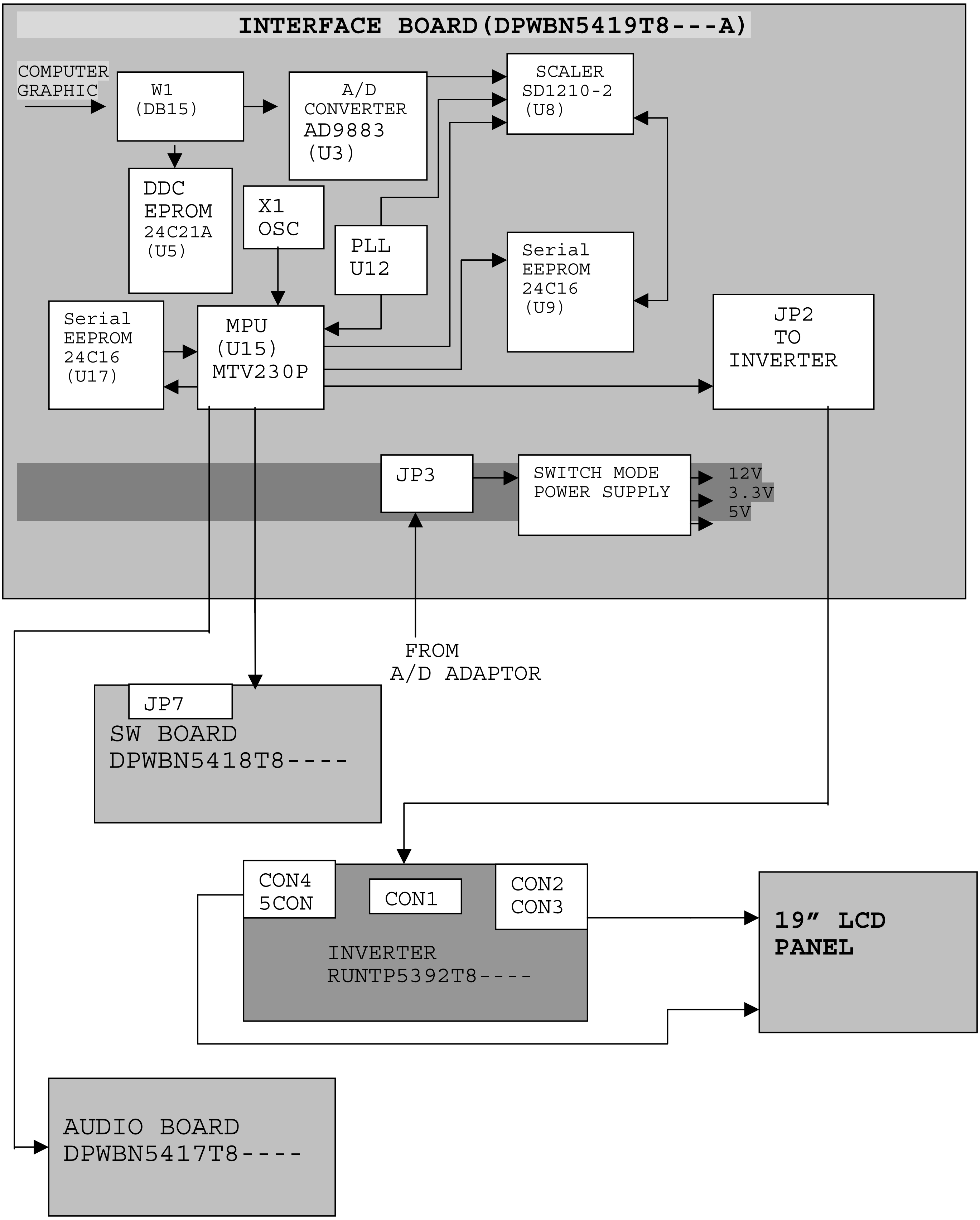
6. The unit is set into Reset mode, OSD main window will be shown on the display, you can see a red message for “ALL RESET” with a red frame inside OSD windows.

7. The LED lights up with orange and change to green color during reset procedure.

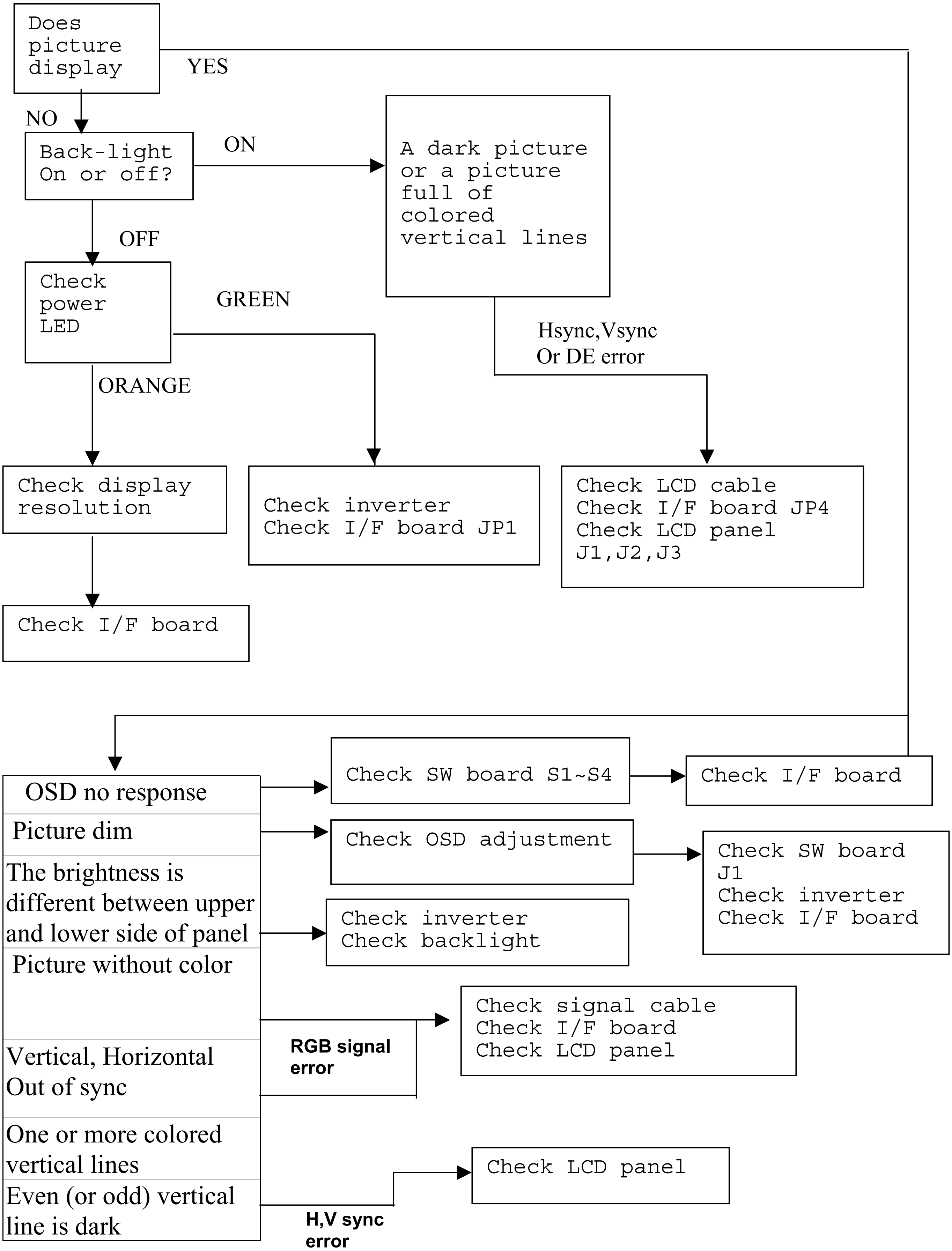
8. OSD changes into a message for "Auto Image Adjust", it disappears after reset procedure.

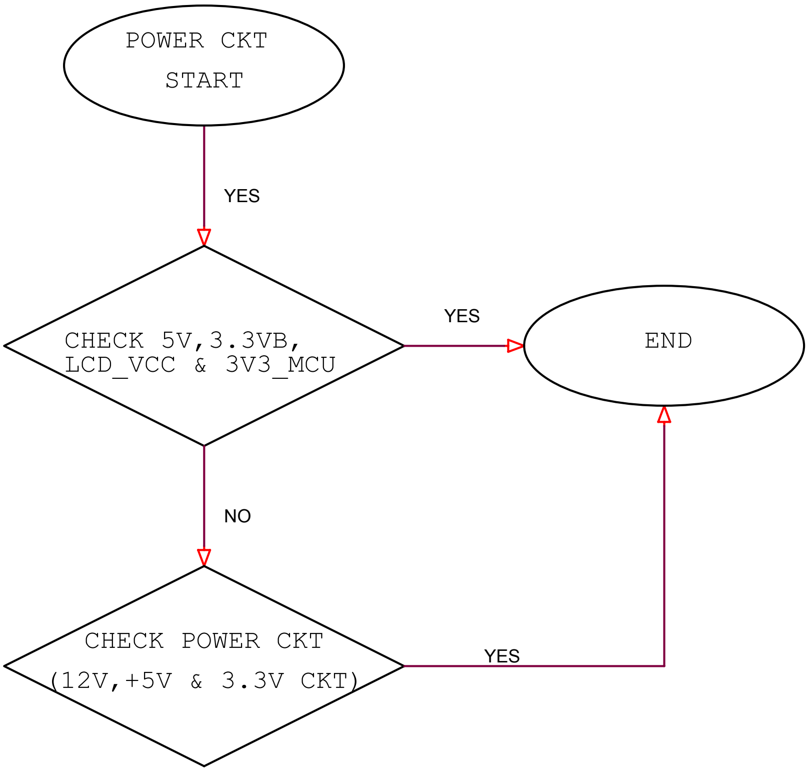
9. After that the input video signal is showed on display.

5. BLOCK DIAGRAM

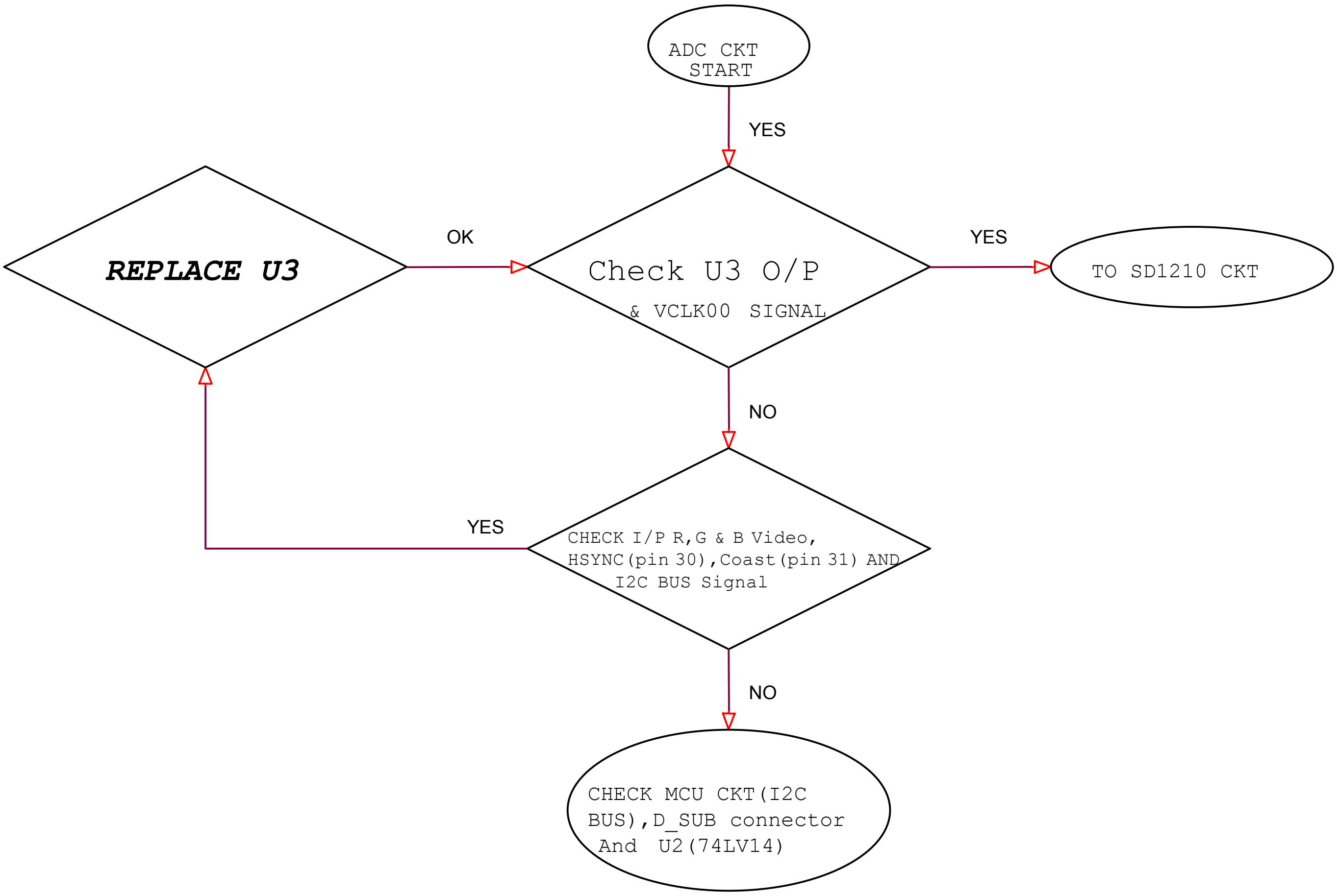


6. TROUBLE SHOOTING FLOW CHART

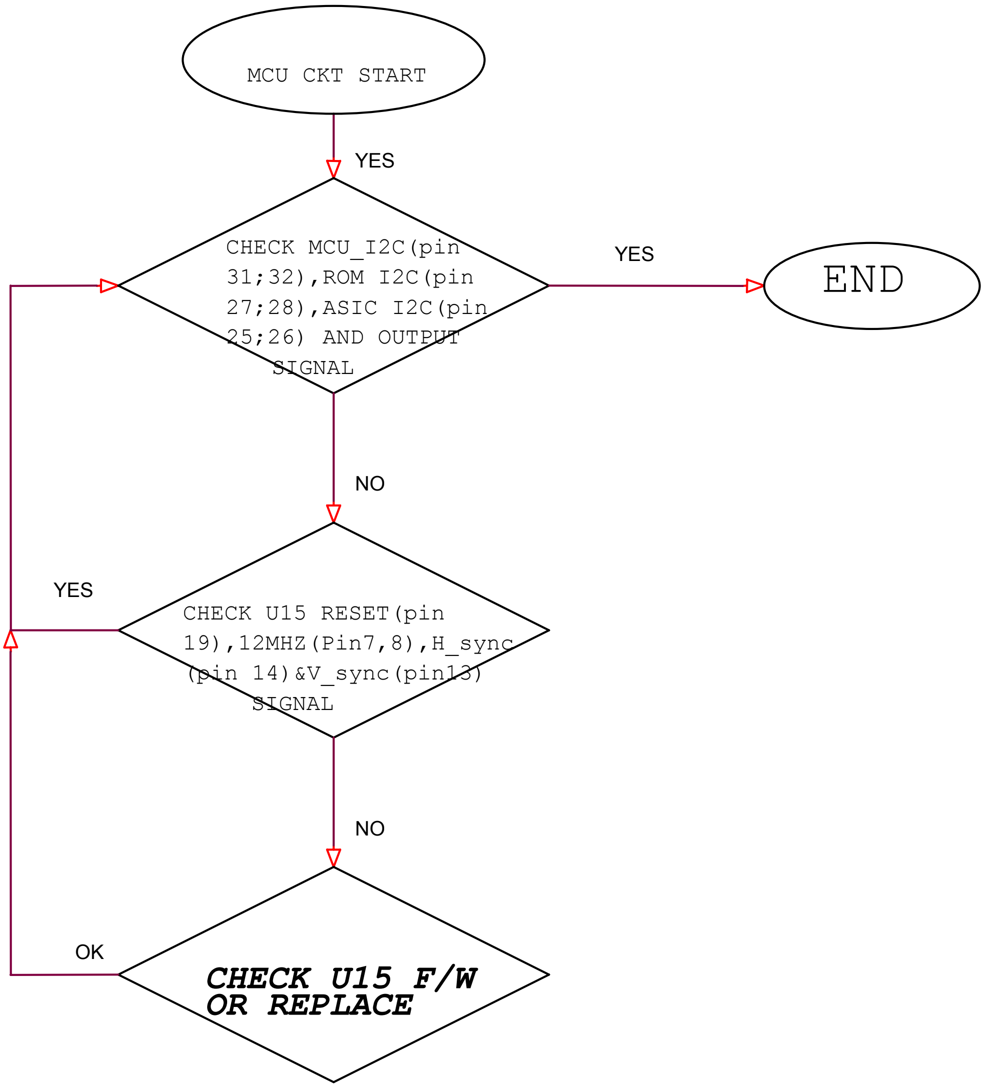



POWER CKT
START
YES
CHECK 5V,3.3VB,
LCD_VCC & 3V3_MCU
YES
END
NO
CHECK POWER CKT
(12V,+5V & 3.3V CKT)
YES

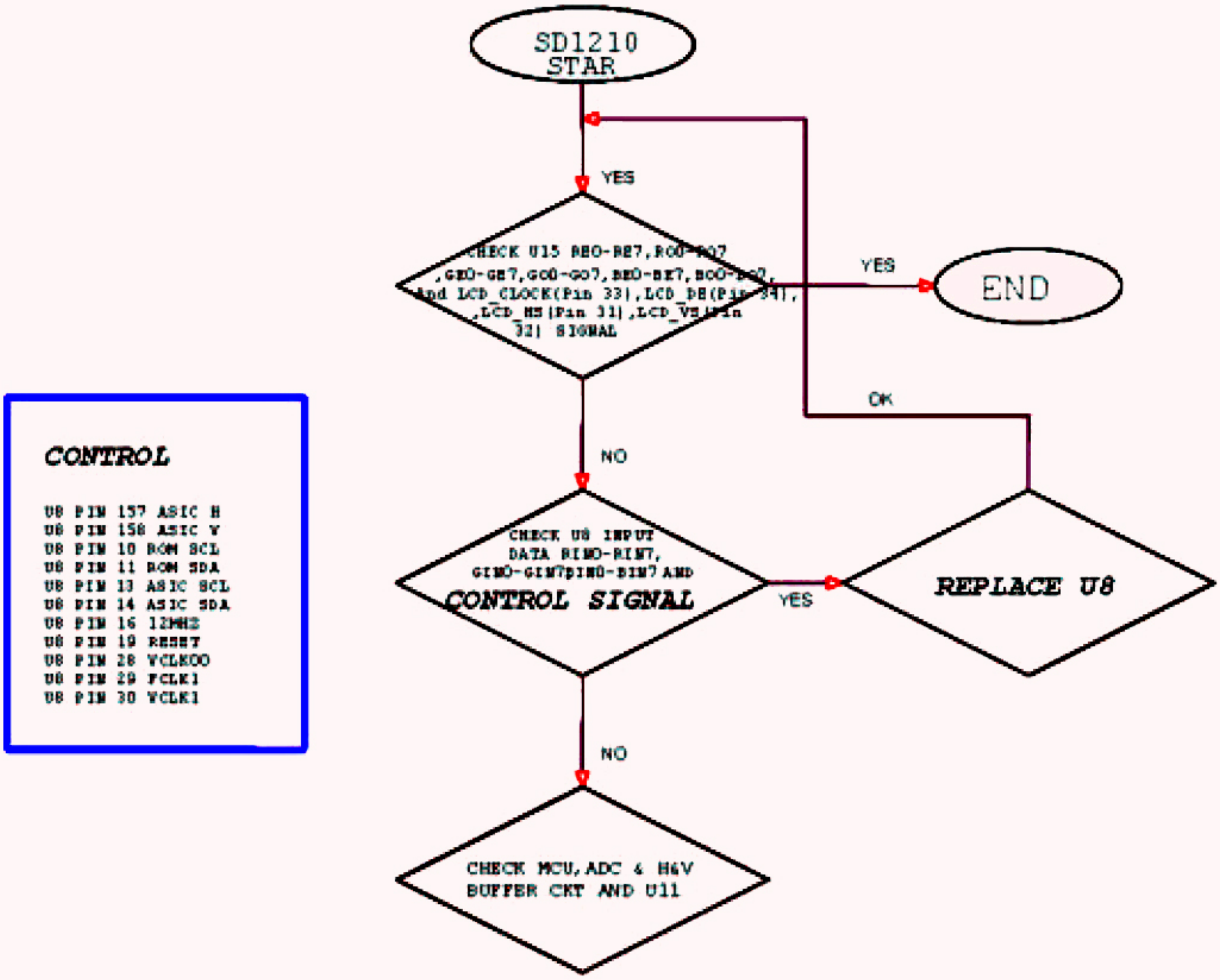
POWER CKT


ADC CKT
START
YES
REPLACE U3
OK
Check U3 O/P
& VCLK00 SIGNAL
YES
TO SD1210 CKT
NO
YES
CHECK I/P R,G & B Video,
HSYNC(pin 30),Coast(pin 31) AND
I2C BUS Signal
NO
CHECK MCU CKT(I2C
BUS),D_SUB connector
And U2(74LV14)

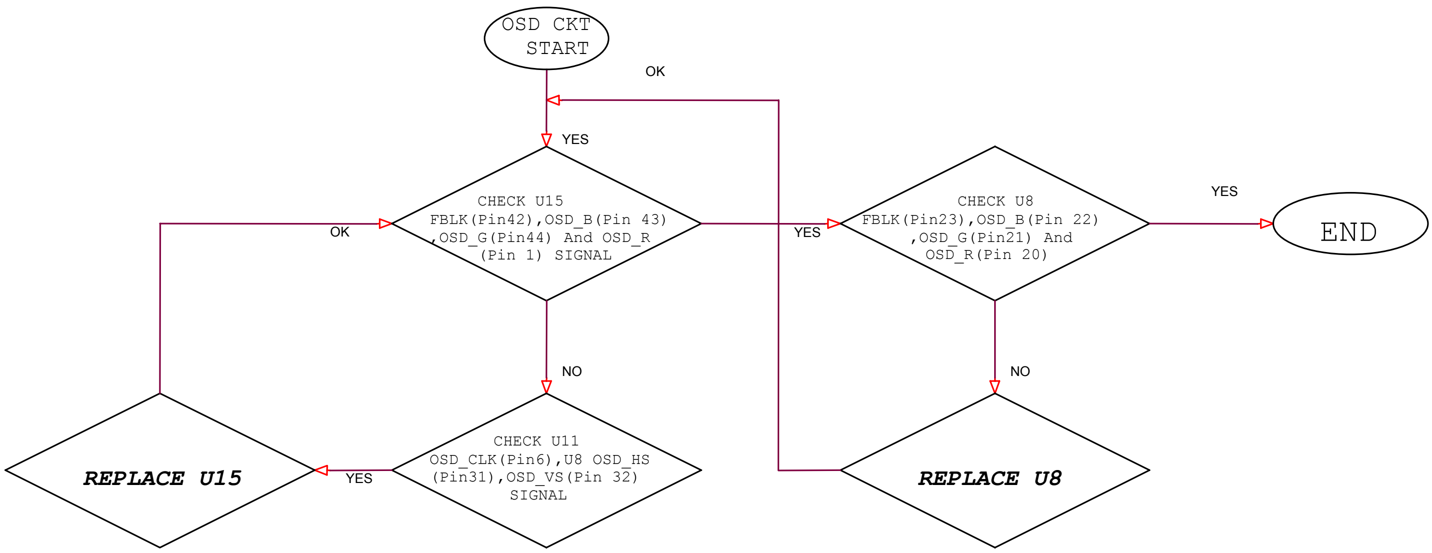
ADC CKT


MCU CKT START
YES
CHECK MCU_I2C(pin 31;32),ROM I2C(pin 27;28),ASIC I2C(pin 25;26) AND OUTPUT SIGNAL
YES
END
NO
YES
CHECK U15 RESET(pin 19),12MHZ(Pin7,8),H_sync (pin 14)&V_sync(pin13) SIGNAL
NO
OK
CHECK U15 F/W OR REPLACE

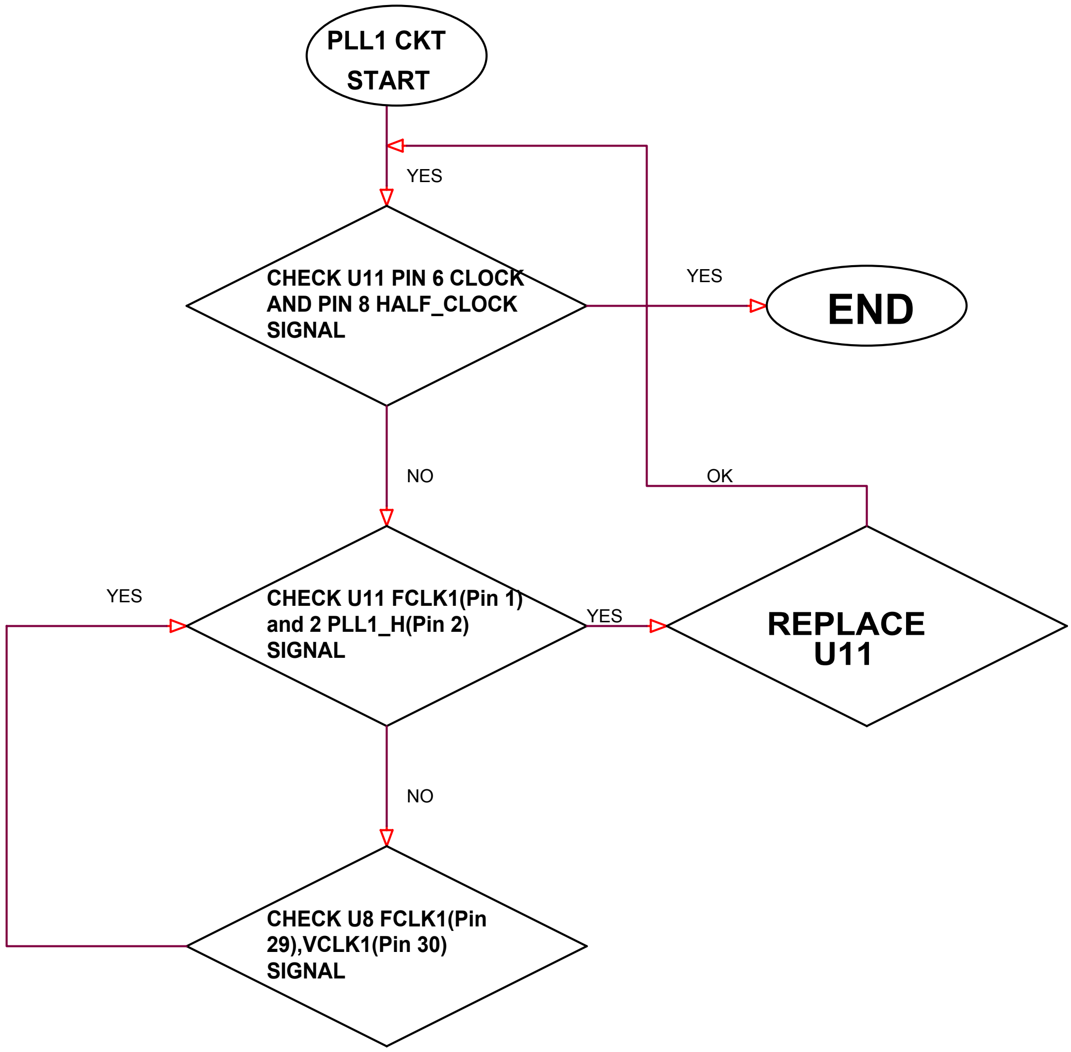
MCU CKT


SD1210
STAR
YES
CHECK U15 REO-RE7,RO0-RO7
,GE0-GE7,GO0-GO7,BEO-BE7,BO0-
And LCD_CLOCK(Pin 33),LCD_DE(Pi
,LCD_HS(Pin 31),LCD_VS
32) SIGNAL
YES
END
OK
NO
CHECK U8 INPUT
DATA RIN0-RIN7,
GIN0-GIN7,BIN0-BIN7 AND
CONTROL SIGNAL
YES
REPLACE U8
NO
CHECK MCU,ADC & H&V
BUFFER CKT AND U11
CONTROL
U8 PIN 157 ASIC H
U8 PIN 158 ASIC V
U8 PIN 10 ROM SCL
U8 PIN 11 ROM SDA
U8 PIN 13 ASIC SCL
U8 PIN 14 ASIC SDA
U8 PIN 16 12MHZ
U8 PIN 19 RESET
U8 PIN 28 VCLKO0
U8 PIN 29 FCLKI
U8 PIN 30 VCLKI

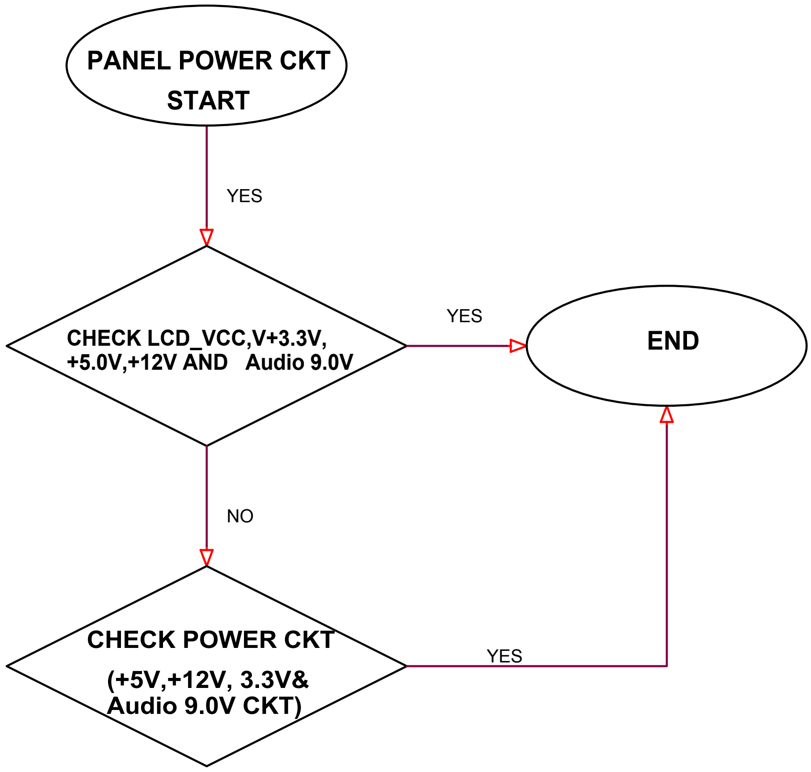
SD1210 CKT


OSD CKT START
OK
YES
CHECK U15 FBLK(Pin42),OSD_B(Pin 43) ,OSD_G(Pin44) And OSD_R (Pin 1) SIGNAL
OK
YES
CHECK U8 FBLK(Pin23),OSD_B(Pin 22) ,OSD_G(Pin21) And OSD_R(Pin 20)
YES
END
NO
NO
CHECK U11 OSD_CLK(Pin6),U8 OSD_HS (Pin31),OSD_VS(Pin 32) SIGNAL
YES
REPLACE U15
REPLACE U8

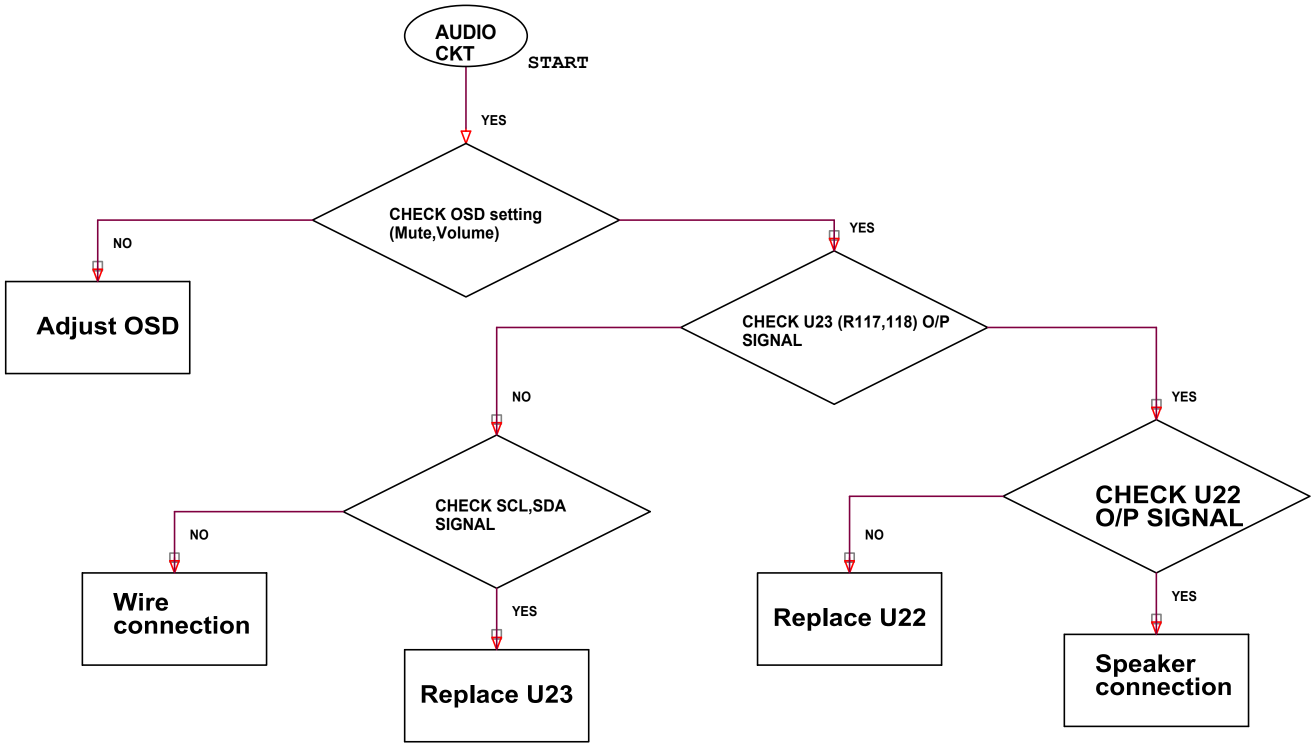
OSD CKT


PLL1 CKT
START
YES
CHECK U11 PIN 6 CLOCK
AND PIN 8 HALF_CLOCK
SIGNAL
YES
END
NO
OK
YES
CHECK U11 FCLK1(Pin 1)
and 2 PLL1_H(Pin 2)
SIGNAL
YES
REPLACE
U11
NO
CHECK U8 FCLK1(Pin
29),VCLK1(Pin 30)
SIGNAL

PLL1 CKT



PANEL POWER CKT


AUDIO
CKT
START
YES
CHECK OSD setting
(Mute,Volume)
NO
YES
Adjust OSD
CHECK U23 (R117,118) O/P
SIGNAL
NO
YES
CHECK SCL,SDA
SIGNAL
CHECK U22
O/P SIGNAL
NO
NO
Wire
connection
YES
Replace U22
YES
Replace U23
Speaker
connection

AUDIO CKT

7. SPARE PARTS LIST

SPARE PARTS LIST			
LOCATION	VIEWSONIC P/N	PARTS NO	DESCRIPTION
BASE	PL-PS-0715-0168	GSTN-2875D8F---	BASE
BASE FRONT COVER	M-CV-0830-2336	GSTN-2876D8F---	BASE FRONT COVER
BASE-BACK COVER	M-CV-0830-2337	GSTN-2877D8F---	BASE-BACK COVER
BASE METAL	M-MS-0808-8259	LANG-2051D8----	BASE METAL
BASE SUPPORT	M-MS-0808-8260	LANG-2052D8----	BASE SUPPORT
CUSHION-A	P-FM-0602-0776	PCUSG1581D8---A	CUSHION
CUSHION-B	P-FM-0602-0777	PCUSG1582D8----	CUSHION
CUSHION-C	P-FM-0602-0778	PCUSG1583D8----	CUSHION
CUSHION-D	P-FM-0602-0796	PCUSG1584D8---A	CUSHION
HINGE ASSEMBLY	M-MS-0808-8265	MHNGM0031D8----	HINGE ASSEMBLY
HIGH VOLTAGE LABEL		TLABZ3978D8----	HIGH VOLTAGE LABEL
SPEAKER	E-SK-0412-0054	RSPKCL015D84FG-	SPEAKER
CAB-A	C-FP-0301-0894	GCABA2104D8F---	CAB-A
CAB-B	M-CV-0830-2342	GCABB1769D8F---	CAB-B
KNOB	PL-NB-0707-0175	JKNBP2311D8F---	KNOB
LENS	M-MS-0808-8257	HDECP1937D8F---	LENS
KNOB-COVER	M-CV-0830-2335	GMSKP1325D8F---	KNOB-COVER
BACK COVER		GC0VD2442D8F---	BACK COVER
VE-LOGO	M-LB-0813-0710	HBDG-1278D8F---	VE-LOGO
VESA METAL	M-MS-0808-8264	LANGN1714D8----	VESA METAL
D-SUB METAL	M-MS-0808-8258	LANG-2050D8----	D-SUB METAL
HINGE SUPPORT	M-MS-0808-8263	LANGH0029D8----	HINGE SUPPORT
VESA GUM	M-MS-0808-8266	PGUM-1105D8----	VESA GUM
VIEWSONIC TEXT		H1NDA1259D8----	VIEWSONIC TEXT LOGO
LOGO PLATE (BIRDS MARK)	M-MS-0808-6478	HBDGA1724D8----	LOGO PLATE (BIRDS MARK)
BASE*4		XBSSN40P08000--	4¢ 8mm BASE*4
BASE SUPPORT*7		XBSSN40P08000--	4¢ 8mm BASE SUPPORT*7
BASE FRONT COVER*4		XBPSN30P08000--	3¢ 8mm BASEFRONT
SPEAKER*4		XEPSD30P12WS0--	3¢ 12mm SPEAKER*4
FOR CAB-A'k2		XBJSD30P10000--	3¢ 10mm CAB-A*2
CAB-A*l		XEPSD30P12000--	3¢ 12mm CAB-A*1
FOR CAB-B*5		XBMSD30P08000--	3¢ 8mm CAB-B*5
FOR SW BOARD*4		XEPSD30P08000--	3¢ 8mm SW BOARD*5
D-SUB*3		XBSSD30P04000-A	3¢ 4mm D-SUB*3
HINGE SUPPORT*6 (120deg)		XBSSD30P04000-A	3¢ 4mm HINGE SUPPORT*6
HINGE SUPPORT		XBPSN40P12JS0--	4¢ 12mm HINGE
FOR D-SUB*5		XBJSD30P04000--	3¢ 4mm D-SUB*5
HINGE SUPPORT*2		XBPSN40P10JS0--	4¢ 10m HINGE SUPPORT*2
BOSS FPR SUB		LB0SM1069D8----	BOSS FPR SUB
KENSINGTON BRACKET	M-MS-0808-8261	LANGF2063D8---A	KENSINGTON BRACKET
DECORATION PLATE		P1SLV0218D8----	DECORATION PLATE
EVA FOR VESA METAL		PCUSS1391D8----	EVA FOR VESA METAL
SPEAKER SCREW RUBBER		PCUSG1609D8----	SPEAKER SCREW RUBBER
EVA FOR HINGE		PCUSS1392D8----	EVA FOR HINGE SUPPORT
FUJITSU PANEL(19")		CPWB-5419T8FUSA	FUJITSU PANEL(19")
CONTROL BOARD	B-SWB-0210-0042	DPWBN5418T8----	CONTROL BOARD ASS'Y
AUDIO BOARD ASS'Y	B-AC-0215-0034	DPWBN5417T8----	AUDIO BOARD ASS'Y
AC ADAPTOR(VSC	A-AD-0114-0155	RUNTP5511T8----	AC ADAPTOR(VSC 12V/5A)
MODEL LABEL		TLABM4280D8T---	MODEL LABEL
USER'S MANUAL		T1NSE2903D8----	USER'S MANUAL
INF FILE DEVICE	A-CD-VA930	DDSKC0023D8----	INF FILE DEVICE
SIGNAL CABLE		QC0DS1584D8D---	SIGNAL CABLE
AC POWER CORD	A-PC-0106-0180	QACC-1126D8D---	AC POWER CORD
UPC LABEL	M-LB-0813-0527	TLABZ3903D8----	UPC LABEL

COLOR KEY	M-MS-0808-6545	TCAD-1222D8----	COLOR KEY
AUDIO CABLE		QC0DK0030D8D---	AUDIO CABLE
POWER CORD(EU 1.8M BLACK)	A-PC-0106-0181	QACC-1228T8D-F-	POWER CORD(EU 1.8M BLACK)
TC099 CARD		TCAD-1277T8----	TC099 CARD
SIN LABEL		TLAB-5373T8----	SIN LABEL
PACKING	P-FM-0602-0797	SPAKA6468D8---A	PACKING
CARTON		SPAKC3325D8---A	CARTON
BAG		SSAKH1356D8-T-A	BAG
PALLET		SPAKW1135D8---A	PALLET
CONNER PAPER	M-MS-0808-5875	SPAKK1703T8Z---	CONNER PAPER
CONNER PAPER		SPAKK6273D8----	CONNER PAPER
SW WIRE	M-WR-0828-0653	QCNWS0908-8016-	SW WIRE
AUDIO WIRE	M-WR-0828-0652	QCNWS0907-8015-	AUDIO WIRE
SPEAKER WIRE	M-WR-0828-0650	QCNWS0904-8030-	SPEAKER WIRE
ASSEMBLY		**CPWB-5419T8FUSA**	
FUSITSU PANEL (19")	M-LCD-0826-0136	VVLFLC48SXC8V--	FUSITSU PANEL (19")
M/B BOARD ASS'Y	B-MB-0201-0697	DPWBN5419T8---A	M/B BOARD ASS'Y
FUSITSU PANEL(19")	B-SB-0221-0463	RUNTP5523T8----	FUSITSU PANEL(19")
MAIN METAL	M-MS-0808-8262	LANGF2068D8----	MAIN METAL
M/B SHIELD	M-MS-0808-8267	PSLDM6477D8----	M/B SHIELD
INVERTER SHIELD		PSLDM6478D8----	INVERTER SHIELD
INVERTER SHIELD		PSLDM6478D8---A	INVERTER SHIELD
INVERTER MYLER		P1SL-1250DS----	INVERTER MYLER
INVERTER MYLAR		P1SL-1250D8---A	INVERTER MYLAR
INVERTER SHIELD		P1SL-1256D8----	INVERTER SHIELD MYLER
INVERTER SHIELD		P1SL-1256D8---A	INVERTER SHIELD MYLAR
FOR LCD PANEL		XBJSD30P10000--	FOR LCD PANEL
FOR INV*4		XH1SD30P06000--	3¢ 6mm INV*4
M/B*5		XH1SD30P06000--	3¢ 6mm M/B*5
AU*4		XH1SD30P06000--	3¢ 6m .1U*4
SHIELD-19		XH1SD30P06000--	3¢ 6mm SHIELD*9
INV*5		XH1SD30P06000--	3¢ 6mm INV*5
PANEL WIRE HOLDER		LHLDW1145D8----	PANEL WIRE HOLDER
PANEL WIRE		QC0DS1576D8----	PANEL WIRE
INVERTER WIRE	M-WR-0828-0651	QCNWS0906-8022-	INVERTER WIRE
LOCATION	VIEWSONIC P/N	PARTS NO	DESCRIPTION
I/F BOARD		QPWB-5419T8---C	I/F BOARD
C1		VCLFHN1HG104Z-A	C .1U Z 50V
C2		VCLFHN1HG104Z-A	C .1U Z 50V
C3		VCLFHN1HG104Z-A	C .1U Z 50V
C4		VCLFHN1HG104Z-A	C .1U Z 50V
C8		VCLFHN1HG104Z-A	C .1U Z 50V
C9		VCLFHN1HG104Z-A	C .1U Z 50V
C10		VCLFHN1HG104Z-A	C .1U Z 50V
C11		VCLFHN1HG104Z-A	C .1U Z 50V
C12		VCLFHN1HG104Z-A	C .1U Z 50V
C13		VCLFHN1HG104Z-A	C .1U Z 50V
C14		VCLFHN1HG104Z-A	C .1U Z 50V
C19 (10UF/16V)		VCEABN1CX106M-A	E 10U M 16V
C19 2nd SOURCE		VCEABN1CX106MNA	E 10U M 16V 2nd
C20		VCLFHN1HG104Z-A	C .1U Z 50V
C21		VCLFHNlHG104Z-A	C .1U Z 50V
C22		VCEABN1CX107M-A	E 100U M 16V
C22 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C27		VCLFHN1HG104Z-A	C .1U Z 50V
C28		VCEABN1CX107M-A	E 100U M 16V
C28 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd

C29		VCLFHN1HG104Z-A	C .1U Z 50V
C30		VCLFHN1HG473Z-A	C .047U Z 50V
C31		VCICHN1HB150J-A	C 15U J 50V
C31 2nd SOURCE		VCLFHN1HG150J-A	C 15U J 50V 2nd
C33		VCLFHN1HG473Z-A	C .047U Z 50V
C34		VCICHN1HB150J-A	C 15U J 50V
C34 2nd SOURCE		VCICHN1HH150K-A	C 15U K 50V 2nd
C34 2nd SOURCE		VCLFHN1HG150J-A	C 15U J 50V 2nd
C35		VCLFHN1HG473Z-A	C .047U Z 50V
C36		VCICHN1HB150J-A	C 15U J 50V
C36 2nd SOURCE		VCICHN1HH150K-A	C 15U K 50V 2nd
C36 2nd SOURCE		VCLFHN1HG150J-A	C 15U J 50V 2nd
C37	E-C-0404-4885	VCICHN1HH330J-A	C 33 J 50V
C38		VCLFHN1HG104Z-A	C .1U Z 50V
C39		VCICHN1HG393M-A	C .0390 M 50V
C40		VCICHN1HH470J-A	C 47U J 50V
C40 2nd SOURCE		VCLFHN1HG470K-A	C 47U K 50V 2nd
C41		VCIRHN1HG392M-A	C 3900P M 50V
C42		VCLFHN1HG104Z-A	C .1U Z 50V
C43		VCLFHN1HG104Z-A	C .1U Z 50V
C44		VCLFHN1HG100J-A	C 10U J 50V
C45	E-C-0404-4885	VCICHN1HH330J-A	C 33 J 50V
C47		VCICHN1HH470J-A	C 47U J 50V
C47 2nd SOURCE		VCLFHN1HG470K-A	C 47U K 50V 2nd
C48		VCLFHN1HG104Z-A	C .1U Z 50V
C49		VCICHN1HG102K-A	C 1000P K 50V
C62	E-C-0404-4885	VCICHN1HH330J-A	C 33 J 50V
C63	E-C-0404-4885	VCICHN1HH330J-A	C 33 J 50V
C70		VCEABN1CX107M-A	E 100U M 16V
C70 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C71	E-C-0404-4885	VCICHN1HH330J-A	C 33 J 50V
C72		VCIRHN1HG392M-A	C 3900P M 50V
C73		VCLFHN1HG104Z-A	C .1U Z 50V
C74		VCICHN1HH470J-A	C 47U J 50V
C74 2nd SOURCE		VCLFHN1HG470K-A	C 47U K 50V 2nd
C75		VCEABN1CX107M-A	E 100U M 16V
C75 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C76		VCLFHN1HG104Z-A	C .1U Z 50V
C77		VCLFHN1HG104Z-A	C .1U Z 50V
C78		VCLFHN1HG104Z-A	C .1U Z 50V
C79		VCLFHN1HG104Z-A	C .1U Z 50V
C80		VCLFHN1HG104Z-A	C .1U Z 50V
C81		VCLFHN1HG104Z-A	C .1U Z 50V
C82		VCLFHN1HG104Z-A	C .1U Z 50V
C83		VCLFHN1HG104Z-A	C .1U Z 50V
C84		VCLFHN1HG104Z-A	C .1U Z 50V
C85		VCLFHN1HG104Z-A	C .1U Z 50V
C86		VCLFHN1HG104Z-A	C .1U Z 50V
C87		VCLFHN1HG104Z-A	C .1U Z 50V
C88		VCLFHN1HG104Z-A	C .1U Z 50V
C89		VCLFHN1HG104Z-A	C .1U Z 56
C92		VCLFHN1HG104Z-A	C .1U Z 50V
C95		VCIRHN1HG103K-A	C .01U K 50V
C96		VCLFHN1HG104Z-A	C .1U Z 50V
C98		VCLFHN1HG104Z-A	C .1U Z 50V
C99		VCEABN1CX107M-A	E 100U M 16V
C99 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C100		VCEABN1CX226M-A	E 22U M 16V
C101		VCLFHN1HG104Z-A	C .1U Z 50V

C102		VCIRHN1HG103K-A	C .01U K 50V
C103		VCLFHN1HG104Z-A	C .1U Z 50V
C104		VCIRHN1HG103K-A	C .01U K 50V
C105		VCLFHN1HG104Z-A	C .1U Z 50V
C106		VCIRHN1HG103K-A	C .01U K 50V
C107		VCLFHN1HG104Z-A	C .1U Z 50V
C108		VCIRHN1HG103K-A	C .01U K 50V
C109		VCLFHN1HG104Z-A	C .1U Z 50V
C110		VCIRHN1HG103K-A	C .01U K 50V
C111		VCLFHN1HG104Z-A	C .1U Z 50V
C112		VCIRHN1HG103K-A	C .01U K 50V
C113		VCEABN1CX226M-A	E 22U M 16V
C114		VCLFHN1HG104Z-A	C .1U Z 50V
C115		VCIRHN1HG103K-A	C .01U K 50V
C116		VCLFHN1HG104Z-A	C .1U Z 50V
C117		VCIRHN1HG103K-A	C .01U K 50V
C118		VCEABN1CX226M-A	E 22U M 16V
C119		VCLFHN1HG104Z-A	C .1U Z 50V
C120		VCIRHN1HG103K-A	C .01U K 50V
C121		VCLFHN1HG104Z-A	C .1U Z 50V
C122		VCIRHN1HG103K-A	C .01U K 50V
C123		VCLFHN1HG104Z-A	C .1U Z 50V
C124		VCLFCN1CG105Z-A	C .1U Z 16V
C125		VCICHN1HH101J-A	C 1000 J 50V
C125 2nd SOURCE		VCLFHN1HG101K-A	C 100U J 50V 2nd
C128		VCICHN1HH220J-A	C 22U J 50V
C129		VCICHN1HH220J-A	C 22U J 50V
C130		VCICHN1HH101J-A	C 100U J 50V
C 130 2nd SOURCE		VCLFHN1HG101K-A	C 100U J 50V 2nd
C131	E-C-0404-4885	VCICHN1HH330J-A	C 33 J 50V
C132		VCLFHN1HG104Z-A	C .1U Z 50V
C132		VCLFHN1HG104Z-A	C .1U Z 50V
C133		VCLFHN1HG104Z-A	C .1U Z 50V
C133		VCLFHN1HG104Z-A	C .1U Z 50V
C135		VCLFHN1HG104Z-A	C .1U Z 50V
C135		VCLFHN1HG104Z-A	C .1U Z 50V
C136	E-C-0404-3972	VCEACU1CH477M-P	E 470U M 16V
C136 2nd SOURCE		VCEACU1CG477M-P	E 470U M 16V 2nd
C137		VCLFHN1HG104Z-A	C .1U Z 50V
C137		VCLFHN1HG104Z-A	C .1U Z 50V
C138		VCLFHN1HG104Z-A	C .1U Z 50V
C138		VCLFHN1HG104Z-A	C .1U Z 50V
C139		VCLFHN1HG104Z-A	C .1U Z 50V
C139		VCLFHN1HG104Z-A	C .1U Z 50V
C141		VCEABN1CX107M-A	E 100U M 16V
C141 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C142	E-C-0404-3972	VCEACU1CH477M-P	E 470U M 16V
C142 2nd SOURCE		VCEACU1CG477M-P	E 470U M 16V 2nd
C143		VCEABN1CX107M-A	E 100U M 16
C143 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C144	E-C-0404-3972	VCEACU1CH477M-P	E 470U M 16V
C144 2nd SOURCE		VCEACU1CG477M-P	E 470U M 16V 2nd
C145		VCLFHN1HG104Z-A	C .1U Z 50V
C145		VCLFHN1HG104Z-A	C .1U Z 50V
C146	E-C-0404-3972	VCEACU1CH477M-P	E 470U M 16V
C146 2nd SOURCE		VCEACU1CG477M-P	E 470U M 16V 2nd
C147		VCEABN1CX107M-A	E 100U M 16V
C147 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C148		VCICHN1EG334Z-A	C .33 Z 25V

C149		VCEABN1CX107M-A	E 100U M 16V
C149 2nd SOURCE		VCEABN1CX107MNA	E 1000 M 16V 2nd
C150		VCLFHN1HG104Z-A	C .1U Z 50V
C150		VCLFHN1HG104Z-A	C .1U Z 50V
C151		VCEABN1CX107M-A	E 100U M 16V
C151 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C152		VCLFHN1HG104Z-A	C .1U Z 50V
C152		VCLFHN1HG104Z-A	C .1U Z 50V
C153		VCICHN1EG334Z-A	C .33 Z 25V
C154		VCICHN1EG334Z-A	C .33 Z 25V
C155		VCEABN1CX107M-A	E 100U M 16V
C155 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C156		VCEABN1CX107M-A	E 100U M 16V
C156 2nd SOURCE		VCEABN1CX107MNA	E 100U M 16V 2nd
C157		VCLFHN1HG104Z-A	C .1U Z 50V
C157		VCLFHN1HG104Z-A	C .1U Z 50V
C158		VCICHN1EG334Z-A	C .33 Z 25V
C161		VCLFHN1HG104Z-A	C .1U Z 50V
C162		VCLFHN1HG100J-A	C 10U J 50V
C163		VCLFHN1HG100J-A	C 10U J 50V
C164		VCLFHN1HG100J-A	C 10U J 50V
C165		VCLFHN1HG100J-A	C 10U J 50V
C166		VCLFHN1HG100J-A	C 10U J 50V
C169		VCLFHN1HG104Z-A	C .1U Z 50V
D1		VSDBAV99------A	DIODE
D2		VSDBAV99------A	DIODE
D3		VSDBAV99------A	DIODE
D3 2nd SOURCE		VSDBAV99A-----A	DIODE
D4		VSDAN202UT106-A	DIODE
D6	E-D-0403-0531	VSD1N4148-----A	DIODE
D7		VSDSS22-------A	SCHOTTKY DIODE
D7 2nd SOURCE		VSDSS24-------A	SCHOTTKY DIODE 2nd
D7 2nd SOURCE		VSDSK22-------A	SCHOTTKY DIODE 2nd
D7 2nd SOURCE		VSDSK24-------A	SCHOTTKY DIODE 2nd
D7 2nd SOURCE		VSDSS34-------A	SCHOTTKY DIODE 2nd
D7 2nd SOURCE		VSDLYSS32-----A	SCHOTTKY DIODE 2nd
D7 2nd SOURCE		VSDSS34----G1-A	SCHOTTKY DIODE 2nd
D7 2nd SOURCE		VSDSM340A-----A	SCHOTTKY DIODE 2nd
D7 2nd SOURCE		VSDB340A------A	SCHOTTKY DIODE 2nd
D7 2nd SOURCE		VSDLYSS24-----A	SCHOTTKY DIODE 2nd
ZD1		VSZRLZ5.6B----A	ZENER DIODE
ZD2		VSZRLZ5.6B----A	ZENER DIODE
ZD3		VSZRLZ5.6B----A	ZENER DIODE
ZD4		VSZRLZ5.6B----A	ZENER DIODE
ZD5		VSZRLZ5.6B----A	ZENER DIODE
ZD10		VSZRLZ5.6B----A	ZENER DIODE
F1	E-FS-0410-0099	QFS-Z402F-81UAA	FUSE 4A 125V
HEAT SINK FOR U18	M-MS-0808-8269	PRDA-1252D8----	RADIATOR
HEAT SINK FOR U8		PRDAA6380D8----	RADIATOR
J1 (FI-SE30P-1-F)		QCNCP1962T8----	CONNECTOR 30PIN
J1 2nd SOURCE (FI-S30P-HF)		QCNCP1961T8----	CONNECTOR 30PIN 2nd
JP1 (OSD CON)		VCNCP0908REJST-	CONNECTOR 8PIN
JP2 (INVERTER CON)		VCNCP0906REJST-	CONNECTOR 6PIN
JP3 (POWER JACK)		QJAKP1044T8----	POWER JACK
JP4 (AUDIO CON)		VCNCP0907REJST-	CONNECTOR 7PIN
L30		RF1L-514778111-	INDUCTOR 100UH
L30 2nd SOURCE		RCHOL1073T8101-	INDUCTOR 100UH 2nd
L30 2nd SOURCE		RCHOL1090T8111-	INDUCTOR 100UH 2nd

U1		VSIA1C1732----A	IC 4PIN
U3	E-IC-0401-2106	VSIAD9883-140-D	IC 80PIN
U4		VSISN74LV14A--A	IC 7PIN
U5 (ANALOG DDC)	E-IC-0401-2137	VSI24C21-------	IC 8PIN
U5 2nd SOURCE		VSI24LCS21A----	IC 8PIN 2nd
U5 2nd SOURCE	E-IC-0401-2287	VSI24LC21A-SN-A	IC 8PIN 2nd
U8		VSISD1210-----D	IC 160PIN
U9	E-IC-0401-2584	VSI24C16-------	IC 8PIN
U9 2nd SOURCE		VSI24C16ADP01--	IC 8PIN 2nd
U9 2nd SOURCE		VSI24C16BP3----	IC 8PIN 2nd
U9 2nd SOURCE		VSI24WC16P-----	IC 8PIN 2nd
U10		VSI74AHC1G14-TA	IC SPIN
U10 2nd SOURCE		VSI74AHCT1G14TA	IC SPIN 2nd
U11		VSIAV9173-01---	IC 8PIN
U11 2nd SOURCE		VSIMK9173-01--A	IC 8PIN 2nd
U12		VSI74HC4053---A	IC 16PIN
U13	E-IC-0401-2564	VSISN75LVDS83-A	IC 56PIN
U14	E-IC-0401-2564	VSISN75LVDS83-A	IC 56PIN
U14 2nd SOURCE		VSIDS90C383A--A	IC 56PIN 2nd
U14 2nd SOURCE		VSI63LVDM83A--A	IC 56PIN 2nd
U14 2nd SOURCE		VSICS5828-----A	IC 56PIN 2nd
U15	E-IC-0401-2108	VSISM0230-----S	IC 44PIN
U15 (PLCC 44)		QSOC11642T844--	CONNECTOR 44PIN
U15 2nd SOURCE		QSOC11645T844--	CONNECTOR 44PIN 2nd
U15 2nd SOURCE		QSOC11660T844--	CONNECTOR 44PIN 2nd
U16		VSI74LCX125MXFA	IC 14PIN
U17	E-IC-0401-2584	VSI24C16-------	IC 8PIN
U17 2nd SOURCE		VSI24C16ADP01--	IC 8PIN 2nd
U17 2nd SOURCE		VSI24C16BP3----	IC 8PIN 2nd
U17 2nd SOURCE		VSI24WC16P-----	IC 8PIN 2nd
U18		VSILM2596S-5---	IC 8PIN
U19		VSIS19433DY---A	IC 8PIN
U20		VSIS19433DY---A	IC 8PIN
U20 2nd SOURCE		VSIFDS4435----A	IC 8PIN 2nd
U20 2nd SOURCE		VSICEM4435----A	IC 8PIN 2nd
U20 2nd SOURCE		VSICEM9433----A	IC 8PIN 2nd
U21		VSIA1C1084-33-A	IC 3PIN
U21 2nd SOURCE		VSIAPL1084-33-A	IC 3PIN 2nd
U21 2nd SOURCE		VSIRT9171-33--A	IC 3PIN 2nd
W1 (DB15,PC99)		QCNCD1173T8----	VGA CONNECTOR
W1 2nd SOURCE		QCNCD1176T8----	VGA CONNECTOR 2nd
X1		RCRSL1132T8----	OSCILLATOR (12MHZ)
X1 2nd SOURCE	E-X-0415-0127	RCRSL1167T8----	OSCILLATOR 2nd
X1 2nd SOURCE		RCRSL1215T8----	OSCILLATOR 2nd
X1 2nd SOURCE		RCRSL1217T8----	OSCILLATOR 2nd
Q1		VST2N3904-----A	TRANSISTOR
Q2		VST2N3904-----A	TRANSISTOR
Q3		VST2N3906-----A	TRANSISTOR
Q4		VST2N3906-----A	TRANSISTOR
Q5		VST2N3904-----A	TRANSISTOR
Q6		VSTIRLMS1503--A	TRANSISTOR
Q7		VSTIRLMS1503--A	TRANSISTOR
Q7 2nd SOURCE		VSTBSH107-----A	TRANSISTOR 2nd
Q7 2nd SOURCE		VSISI3442DV---A	TRANSISTOR 2nd
Q8		VST2N3904-----A	TRANSISTOR
Q9		VST2N3904-----A	TRANSISTOR
Q10		VST2N3904-----A	TRANSISTOR
Q11		VST2N3904-----A	TRANSISTOR
Q12		VST2N3904-----A	TRANSISTOR

Q12 2nd SOURCE		VSTMMBT3904T-MA	TRANSISTOR 2nd
Q12 2nd SOURCE		VSTMMBT3904LT-A	TRANSISTOR 2nd
L2		RFIL-5231T8600A	BEAD CORE (0805)
L3		RFIL-5231T8600A	BEAD CORE (0805)
L4		RFIL-5240T8110A	BEAD CORE
L5		RFIL-5240T8110A	BEAD CORE
L6		RFIL-5240T8110A	BEAD CORE
L7		VRMDNVG--000J-A	SMT 0 J 1/16W
L8		RFIL-5232T8300A	BEAD CORE (0603)
L9		RFIL-5232T8300A	BEAD CORE (0603)
L10		RFIL-5232T8300A	BEAD CORE (0603)
L11		RFIL-5232T8300A	BEAD CORE (0603)
L12		RFIL-5232T8300A	BEAD CORE (0603)
L16		VRMDNVG--000J-A	SMT 0 J 1/16W
L18		VRMDNUG--000J-A	SMT 0 J 1/16W
L19		RFIL-5231T8600A	BEAD CORE (0805)
L20		RFIL-5231T8600A	BEAD CORE (0805)
L21		RFIL-5231T8600A	BEAD CORE (0805)
L22		RFIL-5231T8600A	BEAD CORE (0805)
L23		RFIL-5231T8600A	BEAD CORE (0805)
L24		RFIL-5232T8300A	BEAD CORE (0603)
L25		RFIL-5187T8500A	BEAD CORE (1206)
L26		RFIL-5187T8500A	BEAD CORE (1206)
L27		RFIL-5187T8500A	BEAD CORE (1206)
L28		RFIL-5187T8500A	BEAD CORE (1206)
L29		RFIL-5187T8500A	BEAD CORE (1206)
L31		VRMDNVG--000J-A	SMT 0 J 1/16W
L33		RFIL-5187T8500A	BEAD CORE (1206)
L35		RFIL-5187T8500A	BEAD CORE (1206)
L36		RFIL-5187T8500A	BEAD CORE (1206)
L37		RFIL-5187T8500A	BEAD CORE (1206)
L38		RFIL-5187T8500A	BEAD CORE (1206)
L40		RFIL-5231T8600A	BEAD CORE (0805)
L41		RFIL-5231T8600A	BEAD CORE (0805)
L42		RFIL-5231T8600A	BEAD CORE (0805)
L43		RFIL-5231T8600A	BEAD CORE (0805)
L44		RFIL-5231T8600A	BEAD CORE (0805)
L45		RFIL-5231T8600A	BEAD CORE (0805)
L46		RFIL-5231T8600A	BEAD CORE (0805)
L47		RFIL-5187T8500A	BEAD CORE (1206)
R1		VRMDNVG--750J-A	SMT 75 J 1/16W
R2		VRMDNVG--750J-A	SMT 75 J 1/16W
R3		VRMDNVG--750J-A	SMT 75 J 1/16W
R4		VRMDNVG--750J-A	SMT 75 J 1/16W
R5		VRMDNVG--750J-A	SMT 75 J 1/16W
R6		VRMDNVG--750J-A	SMT 75 J 1/16W
R7		VRMDNVG--470J-A	SMT 47 J 1/16W
R8		VRMDNVG--000J-A	SMT 0 J 1/16W
R9		VRMDNVG--103J-A	SMT 10K J 1/16W
R10		VRMDNVG--103J-A	SMT 10K J 1/16W
R11		VRMDNVG--332J-A	SMT 3.3K J 1/16W
R12		VRMDNVG--151J-A	SMT 150 J 1/16W
R13		VRMDNVG--151J-A	SMT 150 J 1/16W
R14		VRMDNVG--202J-A	SMT 2K J 1/16W
R15		VRMDNVG--202J-A	SMT 2K J 1/16W
R16		VRMDNVG--151J-A	SMT 150 J 1/16W
R17		VRMDNVG--220J-A	SMT 22 J 1/16W
R18		VRMDNVG--151J-A	SMT 150 J 1/16W
R19		VRMDNVG--103J-A	SMT 10K J 1/16W

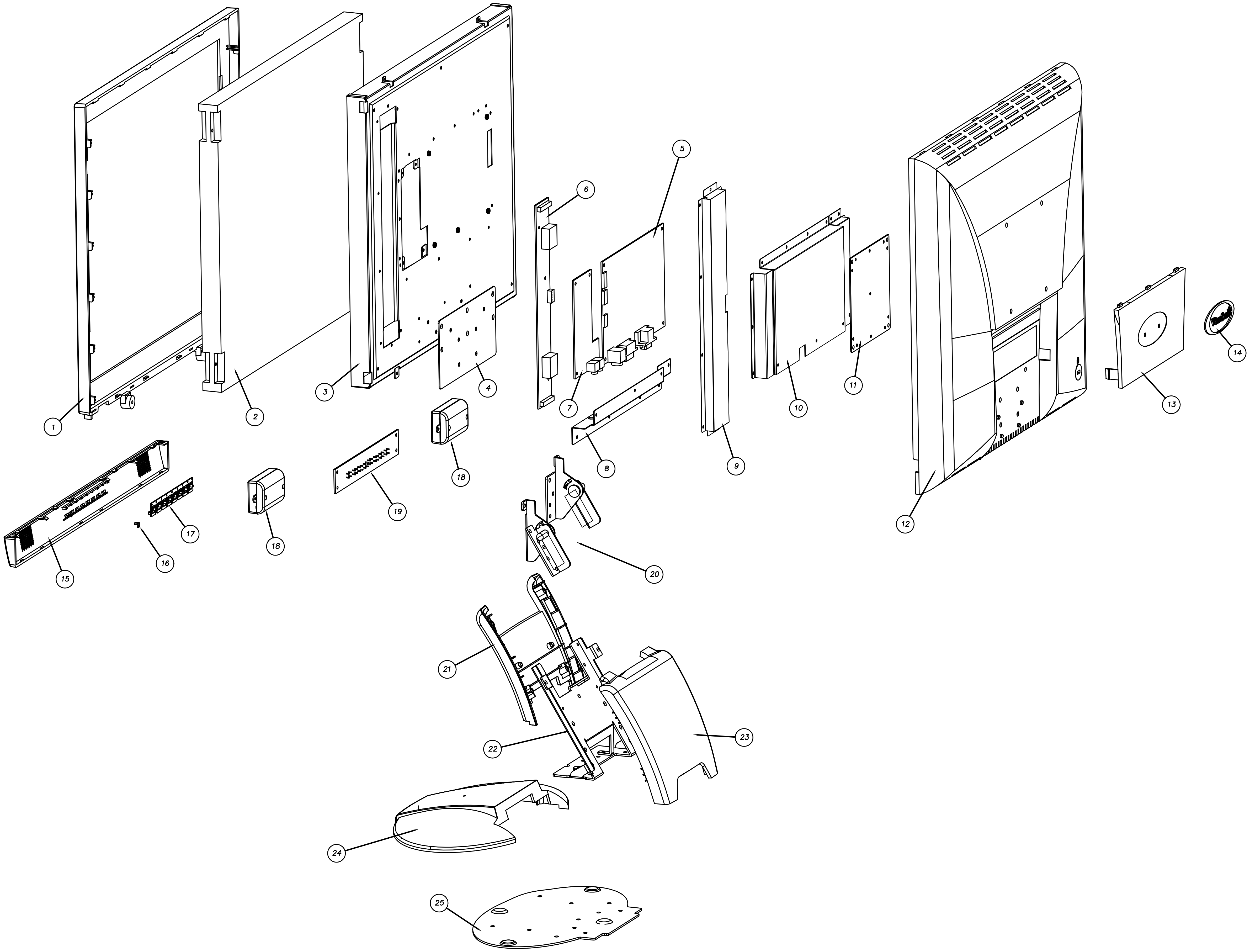
R20		VRMDNVG--103J-A	SMT 10K J 1/16W
R21		VRMDNVG--101J-A	SMT 100 J 1/16W
R22		VRMDNVG--101J-A	SMT 100 J 1/16W
R23		VRMDNVG--103J-A	SMT 10K J 1/16W
R24		VRMDNVG--101J-A	SMT 100 J 1/16W
R28		VRMDNVG--202J-A	SMT 2K J 1/16W
R37		VRMDNVG--330J-A	SMT 33 J 1/16W
R38		VRMDNVG--000J-A	SMT 0 J 1/16W
R39		VRMDNVG--330J-A	SMT 33 J 1/16W
R40		VRMDNVG--330J-A	SMT 33 J 1/16W
R41		VRMDNVG--330J-A	SMT 33 J 1/16W
R42		VRMDNVG--330J-A	SMT 33 J 1/16W
R43		VRMDNVG--330J-A	SMT 33 J 1/16W
R44		RFIL-5235T8600A	BEAD CORE (0805)
R45		VRMDNVG--472J-A	SMT 4.7K J 1/16W
R46		VRMDNVG--472J-A	SMT 4.7K J 1/16W
R49		VRMDNVG--330J-A	SMT 33 J 1/16W
R50		VRMDNVG--220J-A	SMT 22 J 1/16W
R52		VRMDNVG--220J-A	SMT 22 J 1/16W
R53		VRMDNVG--4R7J-A	SMT 4.7 J 1/16W
R54		VRMDNVG--220J-A	SMT 22 J 1/16W
R55		VRMDNVG--220J-A	SMT 22 J 1/16W
R56		VRMDNVG--220J-A	SMT 22 J 1/16W
R58		VRMDNVG--000J-A	SMT 0 J 1/16W
R60		VRMDNVG--000J-A	SMT 0 J 1/16W
R61		VRMDNVG--102J-A	SMT 1K J 1/16W
R62		VRMDNVG--101J-A	SMT 100 J 1/16W
R63		VRMDNVG--101J-A	SMT 100 J 1/16W
R64		VRMDNVG--330J-A	SMT 33 J 1/16W
R65		VRMDNVG--330J-A	SMT 33 J 1/16W
R66		VRMDNVG--101J-A	SMT 100 J 1/16W
R67		VRMDNVG--102J-A	SMT 1K J 1/16W
R68		VRMDNVA--330J-A	SMT 33 J 1/16W
R69		VRMDNVG--202J-A	SMT 2K J 1/16W
R70		VRMDNVG--202J-A	SMT 2K J 1/16W
R71		VRMDNVA--330J-A	SMT 33 J 1/16W
R72		VRMDNVG--105J-A	SMT 1M J 1/16W
R73		VRMDNVG--221J-A	SMT 220 J 1/16W
R74		VRMDNVG--101J-A	SMT 100 J 1/16W
R75		VRMDNVG--330J-A	SMT 33 J 1/16W
R76		VRMDNVG--330J-A	SMT 33 J 1/16W
R77		VRMDNVG--472J-A	SMT 4.7K J 1/16W
R78		VRMDNVG--330J-A	SMT 33 J 1/16W
R79		VRMDNVG--330J-A	SMT 33 J 1/16W
R80		VRMDNVG--000J-A	SMT 0 J 1/16W
R82		VRMDNVG--102J-A	SMT 1K J 1/16W
R83		VRMDNVG--103J-A	SMT 10K J 1/16W
R84		VRMDNVG--220J-A	SMT 22 J 1/16W
R85		VRMDNVG--000J-A	SMT 0 J 1/16W
R86		VRMDNVG--000J-A	SMT 0 J 1/16w
R88		VRMDNVG--104J-A	SMT 100K J 1/16W
R89		VRMDNVG--243J-A	SMT 24K J 1/16W
R90		VRMDNVG--243J-A	SMT 24K J 1/16W
R91		VRMDNVG--472J-A	SMT 4.7K J 1/16W
R92		VRMDNVG--472J-A	SMT 4.7K J 1/16W
R93		VRMDNVG--104J-A	SMT 100K J 1/16W
R94		VRMDNVG--103J-A	SMT 10K J 1/16W
R95		VRMDNVG--103J-A	SMT 10K J 1/16W
R96		VRMDNVG--103J-A	SMT 10K J 1/16W

R97		VRMDNVG--202J-A	SMT 2K J 1/16W
R98		VRMDNVG--202J-A	SMT 2K J 1/16W
R99		VRMDNVG--202J-A	SMT 2K J 1/16W
R100		VRMDNVG--202J-A	SMT 2K J 1/16W
R101		VRMDNVG--202J-A	SMT 2K J 1/16W
R102		VRMDNVG--202J-A	SMT 2K J 1/16W
R103		VRMDNVG--202J-A	SMT 2K J 1/16W
R104		VRMDNVG--202J-A	SMT 2K J 1/16W
R105		VRMDNVG--472J-A	SMT 4.7K J 1/16W
R106		VRMDNVG--000J-A	SMT 0 J 1/16W
R107		VRNmNVG--000J-A	SMT 0 J 1/16W
R108		VRMDNVG--472J-A	SKr 4.7K J 1/16W
R109		VRMDNVG--472J-A	SKr 4.7K J 1/16W
R110		VRMDNVG--472J-A	SMT 4.7K J 1/16W
R111		VRMDNVG--472J-A	SMT 4.7K J 1116W
R151		VRMDNVG--102J-A	SMT 1K J 1/16W
R152		VRMDNVG--101J-A	SMT 100 J 1/16W
R153		VRMDNVG--104J-A	SMT 100K J 1/16W
RP1		RNWRB1618T8101M	R 8PIN 100ohm
RP2		RNWRB1618T8101M	R 8PIN 100ohm
RP3		RNWRB1618T8101M	R 8PIN 100ohm
RP4		RNWRB1618T810lM	R 8PIN 100ohm
RP5		RNWRB1618T8101M	R 8PIN 100ohm
RP6		RNWRB1618T8101M	R 8PIN 100ohm
RP19		RNWRB1618T8330M	R 8PIN 33ohm
RP20		RNWRB1618T8330M	R 8PIN 33ohm
RP21		RNWRB1618T8330M	R 8PIN 33ohm
RP22		RNWRB1618T8330M	R 8PIN 33ohm
RP23		RNWRB1618T8330M	R 8PIN 33ohm
RP24		RNWRB1618T8330M	R 8PIN 33ohm
RP25		RNWRB1618T8330M	R 8PIN 33ohm
RP26		RNWRB1618T8330M	R 8PIN 33ohm
RP27		RNWRB1618T8330M	R 8PIN 33ohm
RP28		RNWRB1618T8330M	R 8PIN 33ohm
RP29		RNWRB1618T8330M	R 8PIN 33ohm
RP30		RNWRB1618T8330M	R 8PIN 33ohm
RP31		RNWRB1618T8330M	R 8PIN 33ohm
RP33		RNWRB1618T8472A	R 8PIN 4.7Kohm
RP34		RNWRB1618T8472A	R 8PIN 4.7Kohm
RP35		RNWRB1618T8472A	R 8PIN 4.7Kohm
RP36		RNWRB1618T8472A	R 8PIN 4.7Kohm
RP37		RNWRB1618T8472A	R 8PIN 4.7Kohm
RP38		RNWRB1618T8472A	R 8PIN 4.7Kohm
RP39		RNWRB1618T8472A	R 8PIN 4.7Kohm
AUDIO BOARD		QPWB-5417T8----	AUDIO BOARD
C158	E-C-0404-1069	VCSFDU1HY104Z-P	C 0.1U Z 50V
C160	E-C-0404-3973	VCEACU1CH107M-P	E 100U M 16V
C161		VCEACU1CG477M-P	E 470U M 16V
C162		VCEACU1CG477M-P	E 470U M 16V
C163	E-C-0404-0943	VCEACU1HH475M-P	E 4.7U M 50V
C164	E-C-0404-3973	VCEACU1CH107M-P	E 100U M 16V
C165	E-C-0404-1069	VCSFDU1HY104Z-P	C 0.1U Z 50V
C169	E-C-0404-1069	VCSFDU1HY104Z-P	C 0.1U Z 50V
C170		VCEACU1CG477M-P	E 470U M 16V
C171	E-C-0404-1069	VCSFDU1HY104Z-P	C 0.1U Z 50V
C172	E-C-0404-3994	VCEACU1HH225M-P	E 2.2U M 50V
C173		VCLFHN1HG104Z-A	SMT.1U Z 50V
C174		VCLFHN1HG104Z-A	SMT.1U Z 50V
C175		VCLFHN1EG224Z-A	SMT .22U Z 25V

C176		VCICHN1HG102K-A	SW 1000P Z 50V
C177	E-C-0404-0944	VCEACU1HH105M-P	E 1U M 16V
C178	E-C-0404-0944	VCEACU1HH105M-P	E 1U M 16V
C179	E-C-0404-0944	VCEACU1HH105M-P	E 1U M 16V
C180	E-C-0404-0944	VCEACU1HH105M-P	E 1U M 16V
C181	E-C-0404-3994	VCEACU1HH225M-P	E 2.2U M 50V
C182		VCLFHN1EG224Z-A	SMT .22U Z 25V
C183		VCICHN1HG102K-A	SMT 1000P Z 50V
C184	E-C-0404-2263	VCEACU1EH226M-P	E 22U M 25V
C185		VCLFHN1HG104Z-A	SMT.1U Z 50V
C186		VCLFHN1HG104Z-A	SMT.1U Z 50V
C187	E-C-0404-3973	VCEACU1CH107M-P	E 100U M 16V
C188		VCLFHN1HG104Z-A	SMT.1U Z 50V
C189	E-C-0404-1199	VCDSDU1HL100D-P	C 10P D 50V
C190	E-C-0404-1199	VCDSDU1HL100D-P	C 10P D 50V
L47		RC0RA1021D8--HU	BEAD CORE
L48		RC0RA1021D8--HU	BEAD CORE
ZD191	E-D-0403-1832	VSZMTZJ3.9B---U	ZENER DIODE
ZD192	E-D-0403-1832	VSZMTZJ3.9B---U	ZENER DIODE
ZD193	E-D-0403-1832	VSZMTZJ3.9B---U	ZENER DIODE
ZD194	E-D-0403-1832	VSZMTZJ3.9B---U	ZENER DIODE
ZD191 2nd	E-D-0403-1831	VSZBX79C3V9B--U	ZENER DIODE 2ND
ZD192 2nd	E-D-0403-1831	VSZBX79C3V9B--U	ZENER DIODE 3ND
ZD193 2nd	E-D-0403-1831	VSZBX79C3V9B--U	ZENER DIODE 4ND
ZD194 2nd	E-D-0403-1831	VSZBX79C3V9B--U	ZENER DIODE 2ND
J1	M-WR-0828-0472	QJUM-1045D8075-	JUMPER
J10	M-WR-0828-0471	QJUM-1045D8050-	JUMPER
J2	M-WR-0828-0472	QJUM-1045D8075-	JUMPER
J3	M-WR-0828-0472	QJUM-1045D8075-	JUMPER
J4	M-WR-0828-0473	QJUM-1045D8100-	JUMPER
J5	M-WR-0828-0473	QJUM-1045D8100-	JUMPER
J6	M-WR-0828-0475	QJUM-1045D8150-	JUMPER
J7	M-WR-0828-0471	QJUM-1045D8050-	JUMPER
J8	M-WR-0828-0471	QJUM-1045D8050-	JUMPER
J9	M-WR-0828-0471	QJUM-1045D8050-	JUMPER
L52	M-WR-0828-0473	QJUM-1045D8100-	JUMPER
L50		RFIL-5232T8300A	BEAD CORE
L51		RFIL-5232T8300A	BEAD CORE
U22		VSILA4635A-----	IC 12PIN
U23		VSIPT2313L----A	IC 28PIN
U24		VSIPJ7809CZ----	IC 3PIN
U24 SECOND SOURCE		VSIPL7809B-----	IC 3PIN 2nd
U24 SECOND SOURCE		VSIL7809CV-----	IC 3PIN and
HEAT SINK FOR U22		PRDA-1253D8----	RADIATOR
SCREW		XEASD30P08000--	SCREW
AUDIO IN		QJAKS0005D8D--G	PHONE JACK
JP3		VCNCP0904SEJST-	CONNECTOR VIN
JP6		VCNCP0907SEJST-	CONNECTOR 7PIN
R105		VRNPTV6--2R2J-U	M 2.2K J 1/6W
R106		VRMPTV6--2R2J-U	M 2.2K J 1/6W
R109	E-R-0405-7020	VRMPTV6--472J-U	M 4.7K J 1/6
R110		VRMDNVG--103J-A	SMT 10K J 1/16W
R111		VRMPTV6--330J-U	M 33 J 1/6W
R112		VRMPTV6--330J-U	M 33 J 1/6
R113		VRMPTV6--242J-U	M 2.4K J 1/6W
R114		VRMPTV6--242J-U	M 2.4K J 1/6W
R115	E-R-0405-1290	VRMPTV6--102J-U	M 1K J 1/6W
R116	E-R-0405-1290	VRMPTV6--102J-U	M 1K J 1/6W
R117	E-R-0405-7020	VRMPTV6--472J-U	M 4.7K J 1/6W

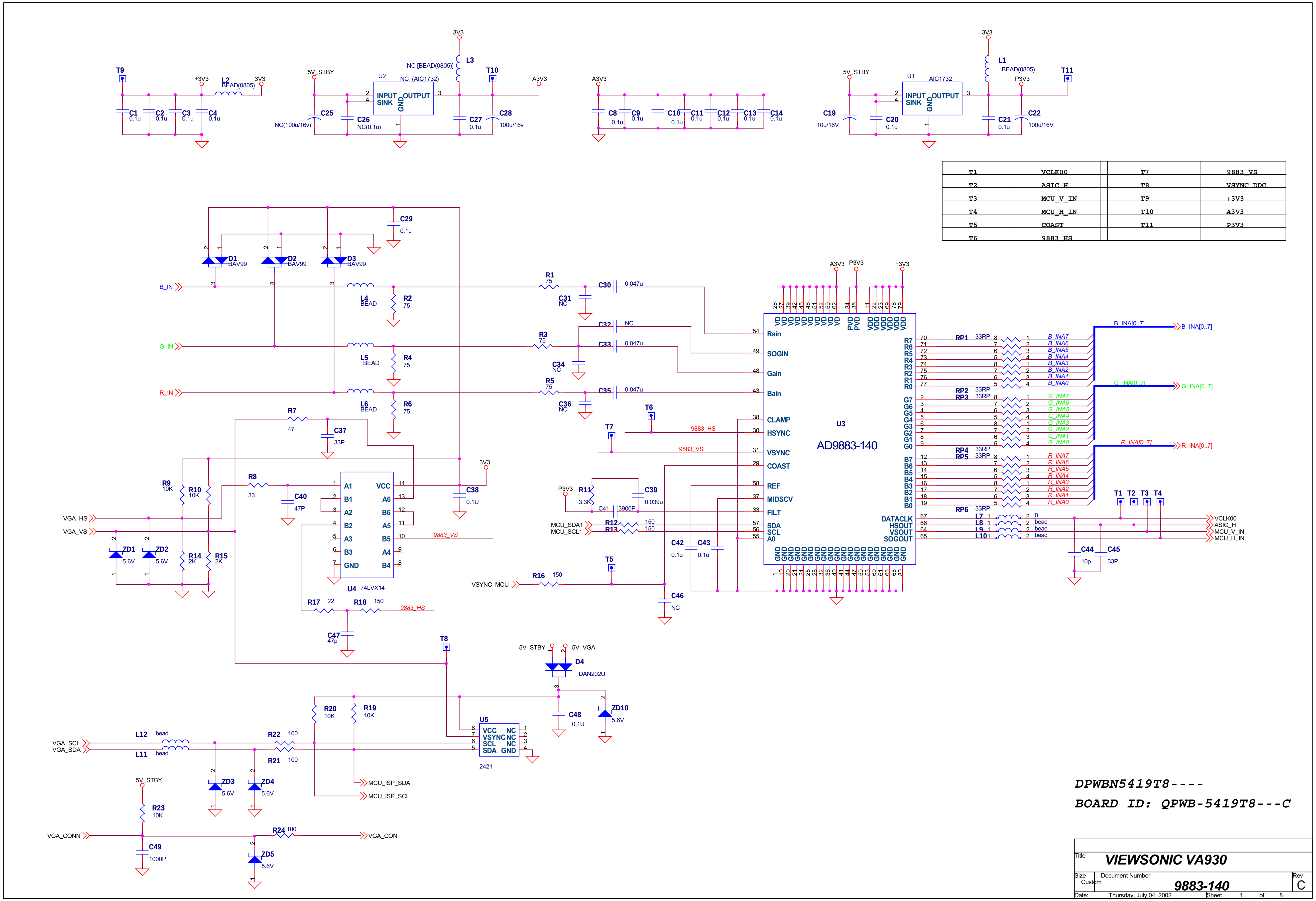
R118	E-R-0405-7020	VRMPTV6--472J-U	M 4.7K J 1/6W
R119		VRMDNVG--103J-A	SMT 10K J 1/16W
R191	E-R-0405-1250	VRMPTV6--103J-U	M 10K J 1/6W
R192	E-R-0405-1250	VRMPTV6--103J-U	M 10K J 1/6W
LOCATION	VIEWSONIC P/N	PARTS NO	DESCRIPTION
CONTROL BOARD		QPWB-5418T8--1-	CONTROL BOARD
C193		VCICHNlHHl0lJ-A	SMT 100P J 50V
C194		VCICHN1HH101J-A	SMT 100P J 50V
C195		VCICHNlHH101J-A	SMT 100P J 50V
J1	M-WR-0828-0472	QJUM-1045D8075-	JUMPER
J2	M-WR-0828-0472	QJUM-1045D8075-	JUMPER
J3	M-WR-0828-0472	QJUM-1045D8075-	JUMPER
J4	M-WR-0828-0472	QJUM-1045D8075-	JUMPER
J5	M-WR-0828-0472	QJUM-1045D8075-	JUMPER
J6	M-WR-0828-0472	QJUM-1045D8075-	JUMPER
L53		RFIL-5232T8300A	BEAD CORE
L54		RFIL-5232T8300A	BEAD CORE
L55		RFIL-5232T8300A	BEAD CORE
L56		RFIL-5232T8300A	BEAD CORE
L57		RFIL-5232T8300A	BEAD CORE
SW1		QSW-A1124T8----	SWITCH
SW2		QSW-A1124T8----	SWITCH
SW3		QSW-A1124T8----	SWITCH
SW4		QSW-A1124T8----	SWITCH
SW5		QSW-Al124T8----	SWITCH
SW6		QSW-A1124T8----	SWITCH
SW7		QSW-A1124T8----	SWITCH
SW8		QSW-A1124T8----	SWITCH
LED		VSPSPR-39MVWF--	LED
JP7		VCNCP0908REJST-	CONNECTOR 8PIN
R120		VRMDNVG--472J-A	SMT 4.7K J 1/16W
R121		VRMDNVG--222J-A	SMT 2.2K J 1/16W
R122		VRMDNVG--752J-A	SMT 7.5K J 1/16W
R123		VRMDNVG--472J-A	SMT 4.7K J 1/16W
R124		VRMDNVG--222J-A	SMT 2.2K J 1/16W
R125		VRMDNVG--203J-A	SMT 20K J 1/16W
R126		VRMDNVG--752J-A	SMT 7.5K J 1/16W

8. EXPLODED DIAGRAM

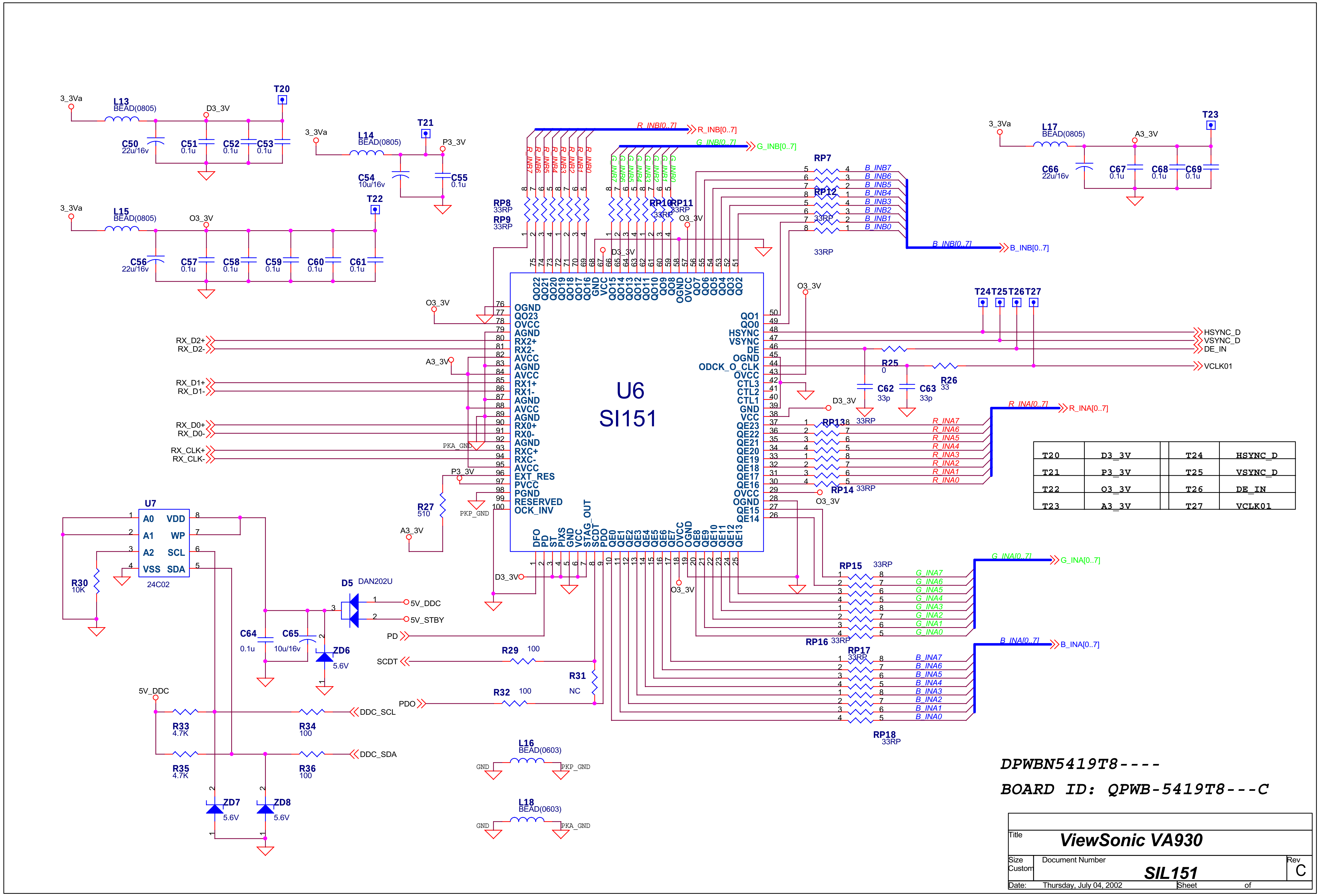


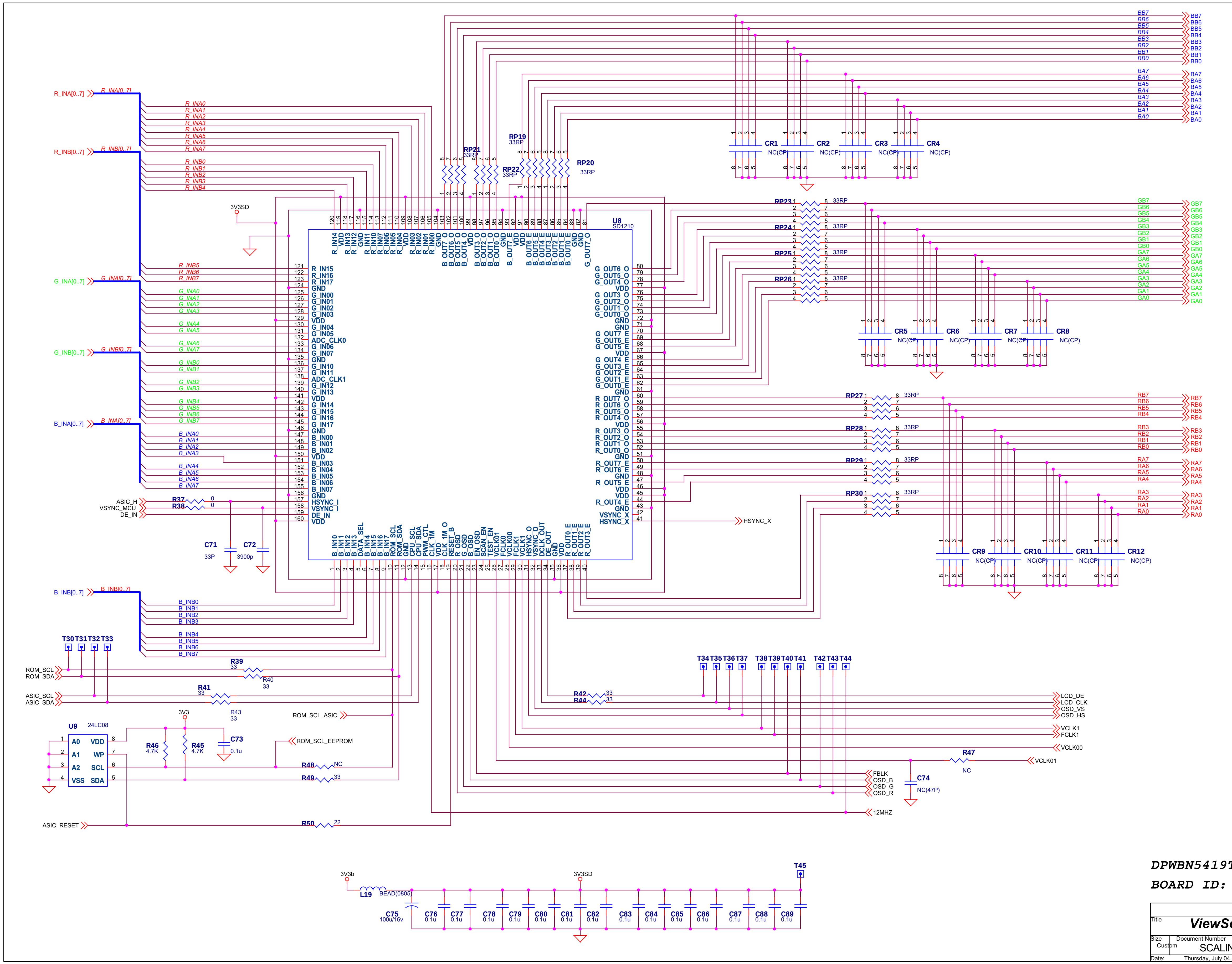
MECHANICAL PARTS LIST				
NO	VIEWSONIC P/N	PART NO	QTY	REMARK
1	C-FP-0301-0894	GCABA2104D8F---	1	CAB-A
2		CPWB-5419T8FUSA	1	FUJISTU PANEL (19")
3	M-MS-0808-8262	LANGF2068D8----	1	MAIN METAL
4	M-MS-0808-8263	LANGH0029D8----	1	HINGE SUPPORT
5	B-MB-0201-0697	DPWBN5419T8---A	1	M/B BOARD ASSY
6	B-SB-0221-0463	RUNTP5523T8----	1	INVERTER BOARD
7	B-AC-0215-0034	DPWBN5417T8----	1	AUDIO BOARD ASS'Y
8	M-MS-0808-8258	LANG-2050D8----	1	D-SUB METAL
9		PSLDM6478D8----	1	INVERTER SHIELD
10	M-MS-0808-8267	PSLDM6477D8----	1	SHIELD
11	M-MS-0808-8264	LANGN1714D8----	1	VESA METAL
12	M-CV-0830-2342	GCABB1769D8F---	1	CAB-B
13	C-BC-0302-0436	GCOVD2442D8F---	1	BACK COVER
14	M-LB-0813-0710	HBDG-1278D8F---	1	VE-LOGO
15	M-CV-0830-2335	GMSKP1325D8F---	1	SPEAKER-COVER
16	M-MS-0808-8257	HDECP1937D8F---	1	LENS
17	PL-NB-0707-0175	JKNBP2311D8F---	1	KNOB
18	E-SK-0412-0054	RSPKCL015D84FG-	2	SPEAKER
19	B-SWB-0210-0042	DPWBN5418T8----	1	CONTROL BOARD ASS'Y
20	M-MS-0808-8265	MHNGM0031D8----	1	HINGE ASSEMBLY
21	M-CV-0830-2336	GSTN-2876D8F---	1	BASE FRONT COVER
22	M-MS-0808-8260	LANG-2052D8----	1	BASE SUPPORT
23	M-CV-0830-2337	GSTN-2877D8F---	1	BASE-BACK COVER
24	PL-PS-0715-0168	GSTN-2875D8F---	1	BASE
25	M-MS-0808-8259	LANG-2051D8----	1	BASE METAL

9 . SCHEMATIC DIAGRAM



T1	VCLK00	T7	9883_VS
T2	ASIC_H	T8	VSYNC_DDC
T3	MCU_V_IN	T9	+3V3
T4	MCU_H_IN	T10	A3V3
T5	COAST	T11	P3V3
T6	9883_HS		


U6
SI151
U7
24C02
DPWBN5419T8----
BOARD ID: QPWB-5419T8---C
T20 D3_3V T24 HSYNC_D
T21 P3_3V T25 VSYNC_D
T22 O3_3V T26 DE_IN
T23 A3_3V T27 VCLK01
Title
ViewSonic VA930
Size
Custom
Document Number
SIL151
Rev
C
Date: Thursday, July 04, 2002
Sheet
of



T30	ROM_SCL
T31	ROM_SDA
T32	ASIC_SCL
T33	ASIC_SDA
T34	LCD_DE
T35	LCD_CLK
T36	OSD_VS
T37	OSD_HS
T38	VCLK1
T39	FCLK1
T40	FBLK
T41	OSD_B
T42	OSD_G
T43	OSD_R
T44	12MHZ
T45	3V3SD

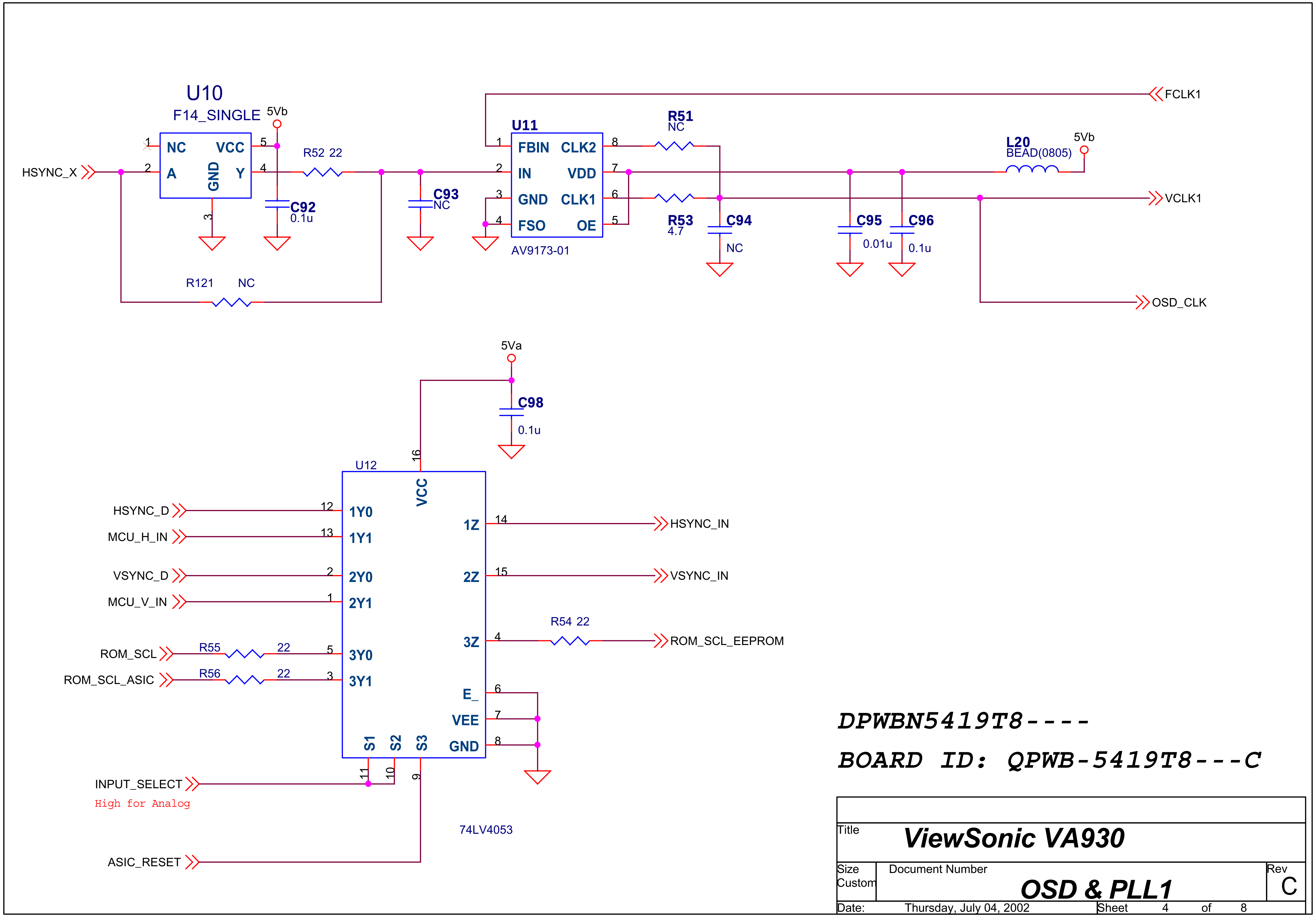
DPWBN5419T8----

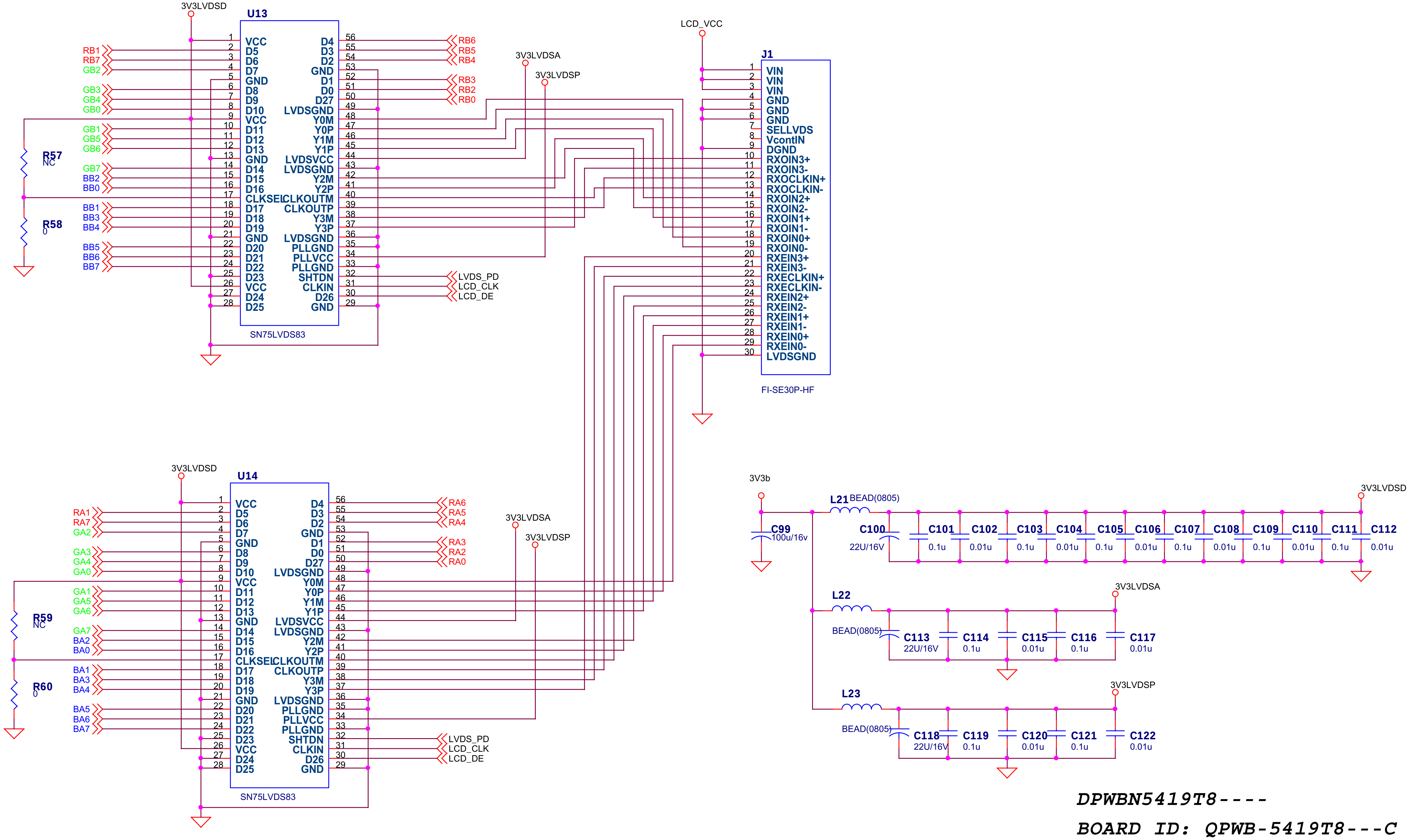
BOARD ID: QPWB-5419T8---C

Title: ViewSonic VA930

Size: Custom | Document Number: SCALING CONTROLLOR | Rev: C

Date: Thursday, July 04, 2002 | Sheet of

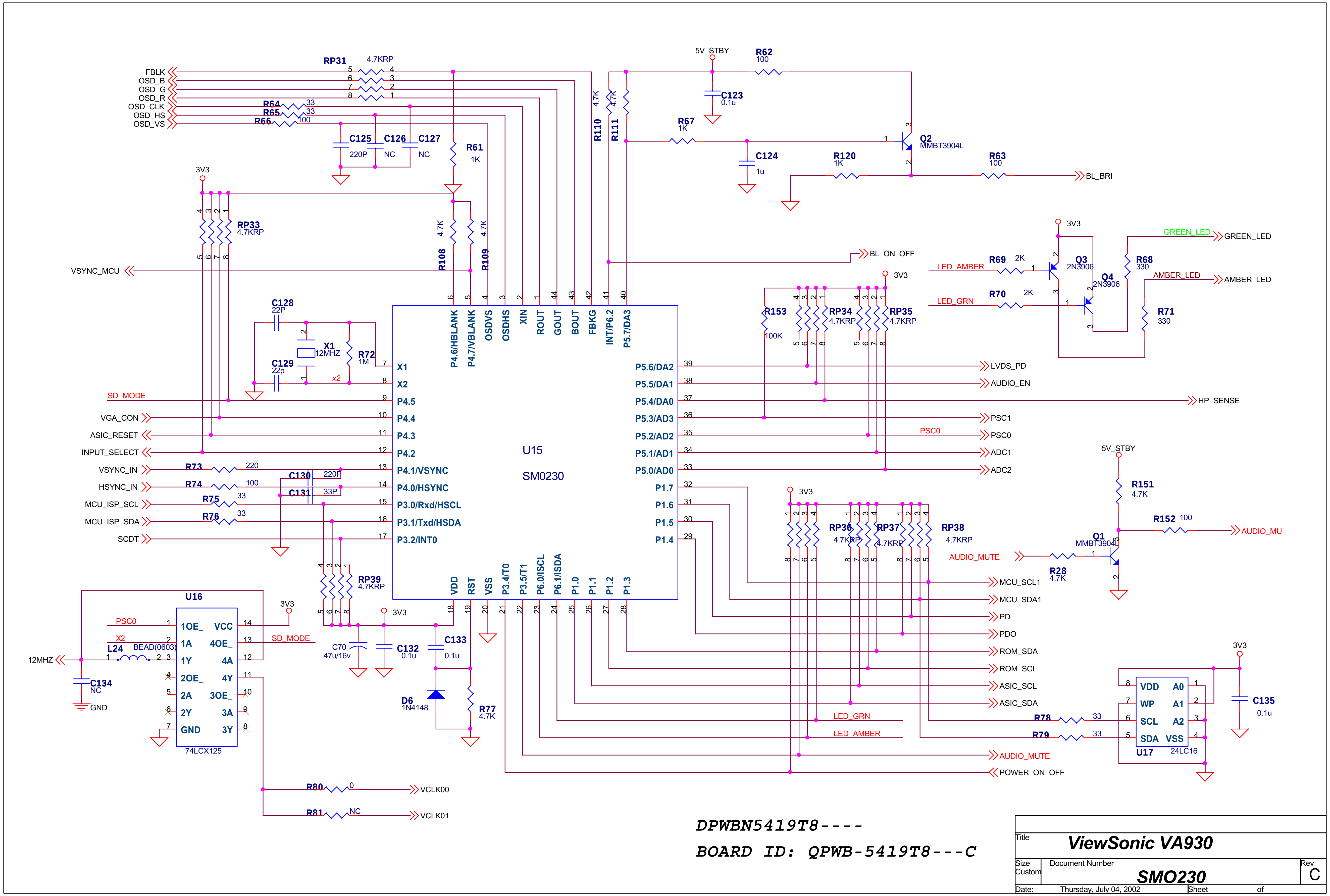

U10
F14_SINGLE
5Vb
NC
VCC
A
GND
Y
HSYNC_X
R52 22
C92
0.1u
R121
NC
U11
FBIN
CLK2
IN
VDD
GND
CLK1
FSO
OE
AV9173-01
C93
NC
R51
NC
R53
4.7
C94
NC
C95
0.01u
C96
0.1u
L20
BEAD(0805)
5Vb
FCLK1
VCLK1
OSD_CLK
5Va
C98
0.1u
U12
VCC
HSYNC_D
MCU_H_IN
VSYNC_D
MCU_V_IN
ROM_SCL
ROM_SCL_ASIC
R55
22
R56
22
1Y0
1Y1
2Y0
2Y1
3Y0
3Y1
1Z
2Z
3Z
E_
VEE
GND
S1
S2
S3
HSYNC_IN
VSYNC_IN
R54 22
ROM_SCL_EEPROM
INPUT_SELECT
High for Analog
ASIC_RESET
74LV4053
DPWBN5419T8----
BOARD ID: QPWB-5419T8---C
Title
ViewSonic VA930
Size
Custom
Document Number
OSD & PLL1
Rev
C
Date: Thursday, July 04, 2002
Sheet 4 of 8



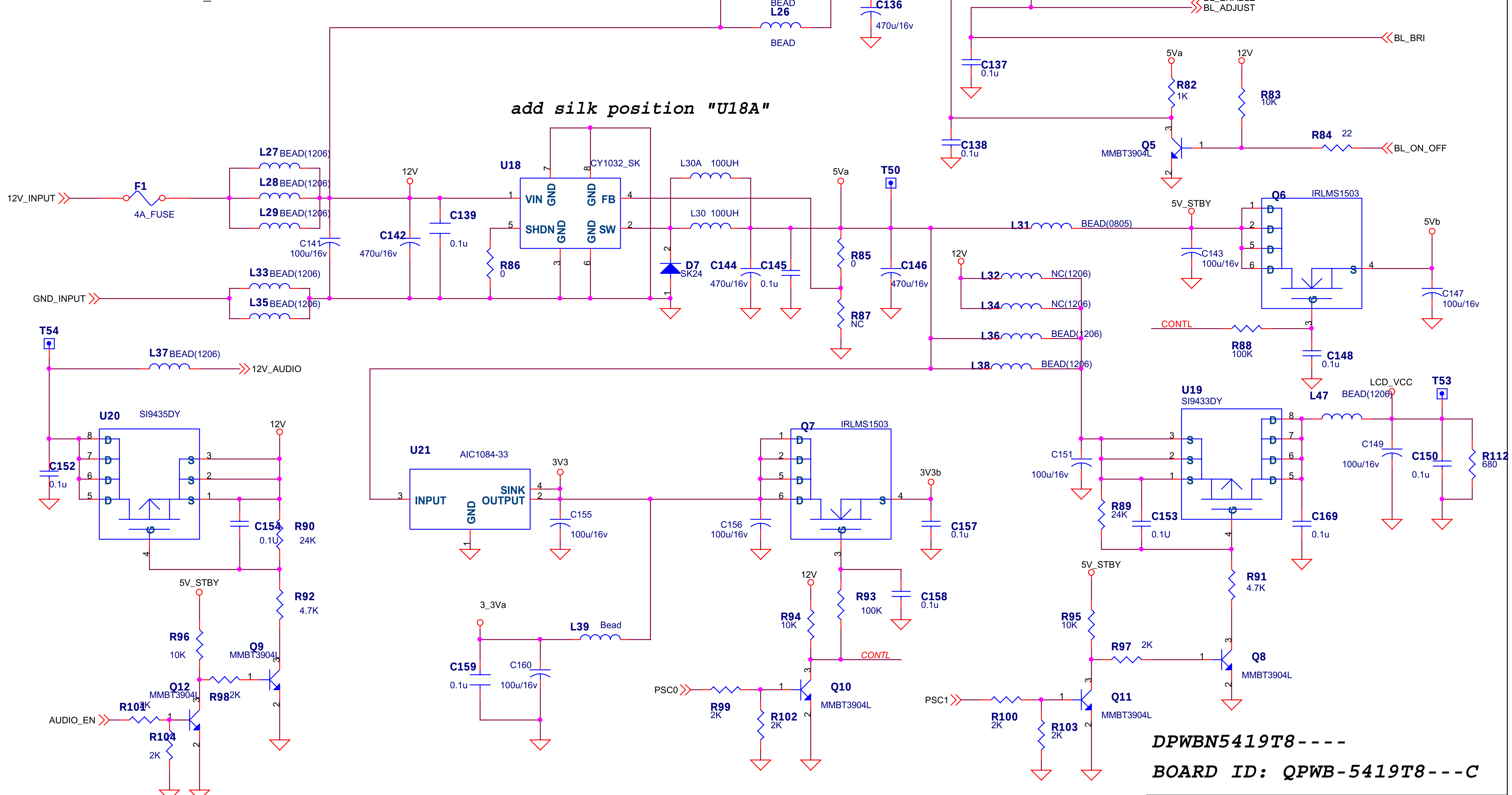
DPWBN5419T8----

BOARD ID: QPWB-5419T8---C

Title	ViewSonic VA930	
Size: Custom	Document Number: LVDS INTERFACE	Rev: C
Date: Thursday, July 04, 2002	Sheet of	


U15
SM0230
U16
74LCX125
U17
24LC16
X1 12MHZ
Q1 MMBT3904L
Q2 MMBT3904L
Q3 2N3906
Q4 2N3906
D6 1N4148
FBLK
OSD_B
OSD_G
OSD_R
OSD_CLK
OSD_HS
OSD_VS
VSYNC_MCU
SD_MODE
VGA_CON
ASIC_RESET
INPUT_SELECT
VSYNC_IN
HSYNC_IN
MCU_ISP_SCL
MCU_ISP_SDA
SCDT
12MHZ
VCLK00
VCLK01
BL_BRI
BL_ON_OFF
GREEN_LED
AMBER_LED
LVDS_PD
AUDIO_EN
HP_SENSE
PSC1
PSC0
ADC1
ADC2
AUDIO_MU
AUDIO_MUTE
MCU_SCL1
MCU_SDA1
PD
PDO
ROM_SDA
ROM_SCL
ASIC_SCL
ASIC_SDA
LED_GRN
LED_AMBER
POWER_ON_OFF
5V_STBY
3V3
DPWBN5419T8----
BOARD ID: QPWB-5419T8---C
Title
ViewSonic VA930
Size Custom
Document Number
SMO230
Rev C
Date: Thursday, July 04, 2002
Sheet of

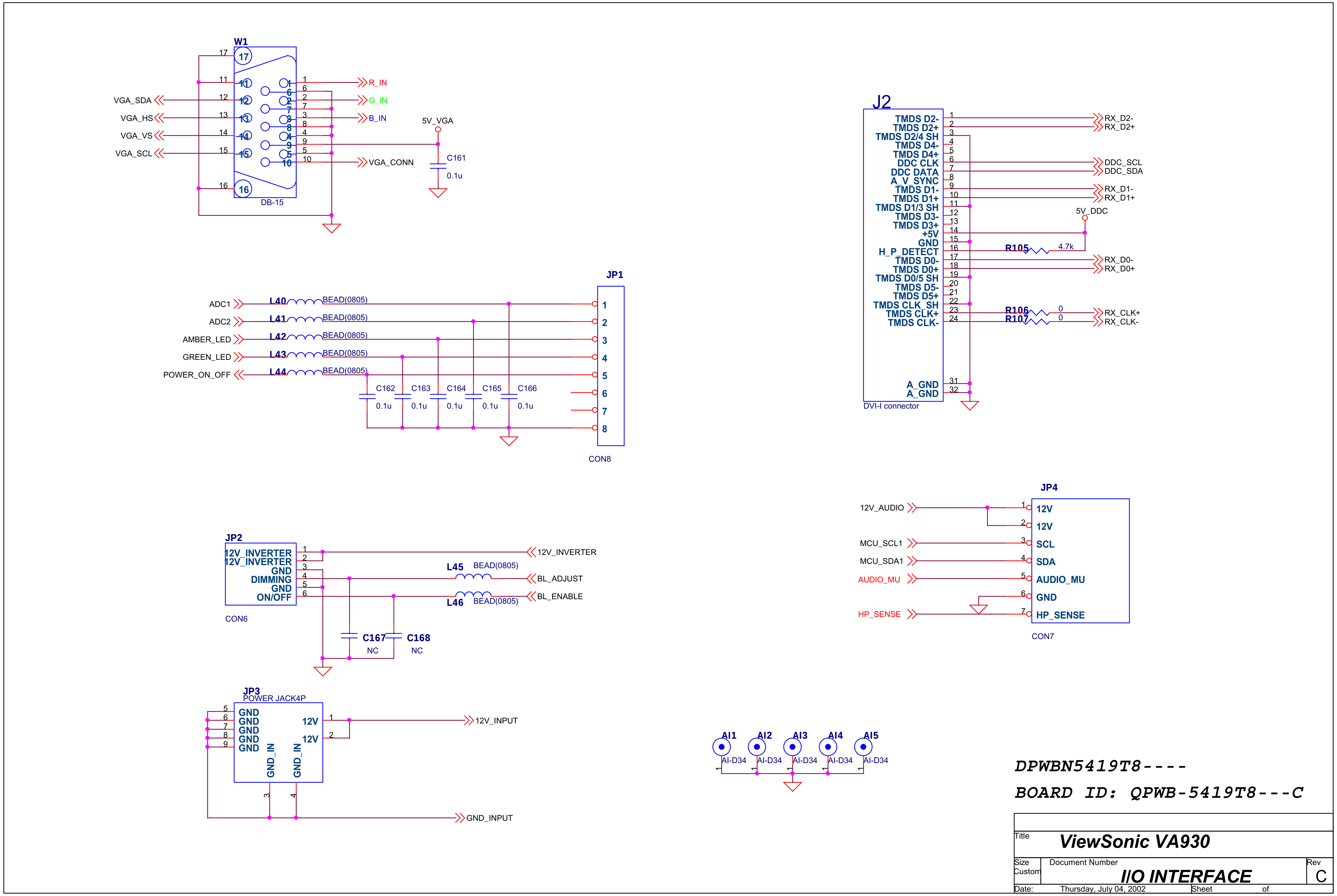
T50	5Va
T51	BL_ENABLE
T52	BL_ADJUST
T53	LCD_VCC
T54	12V_AUDIO

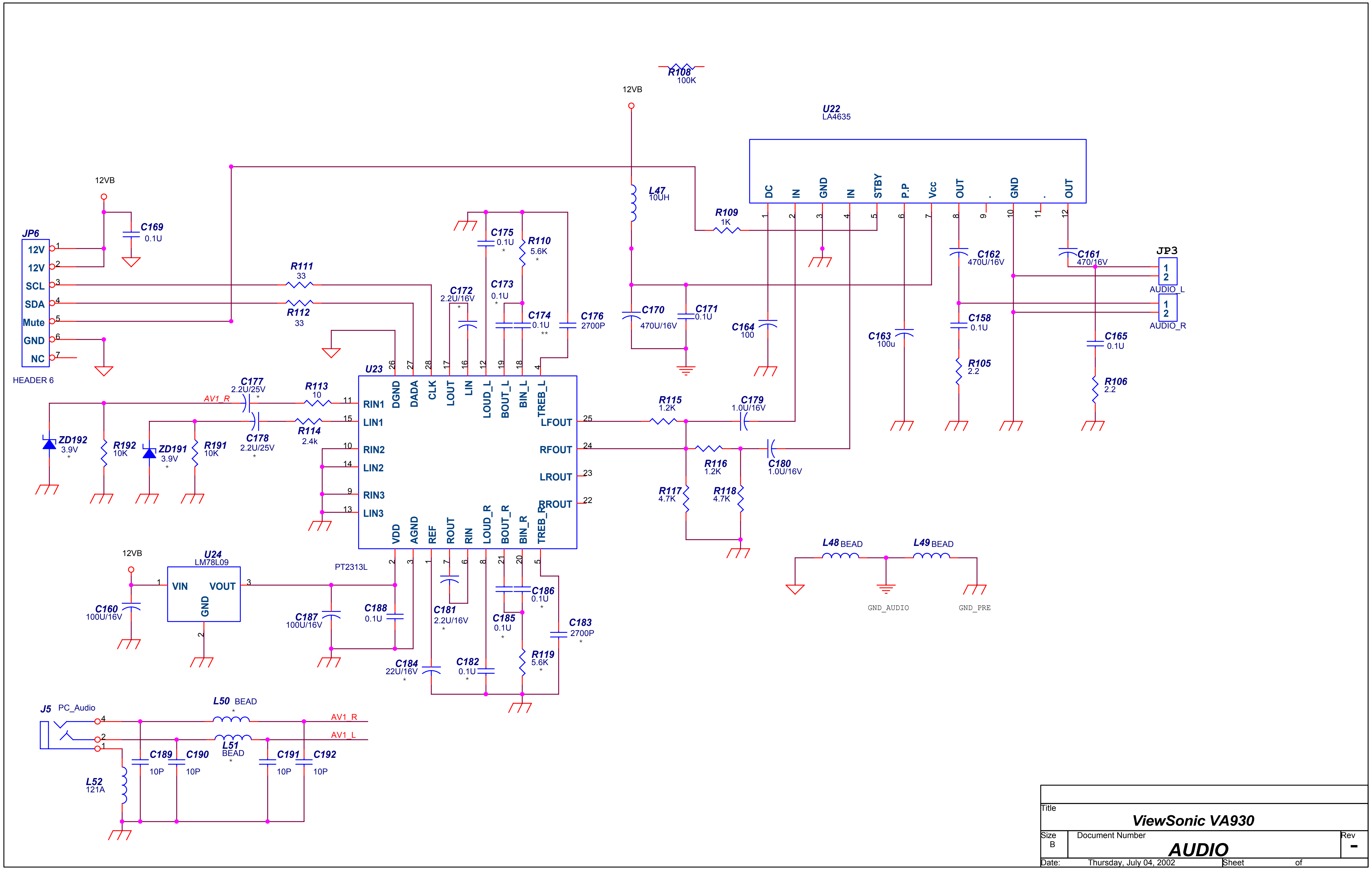


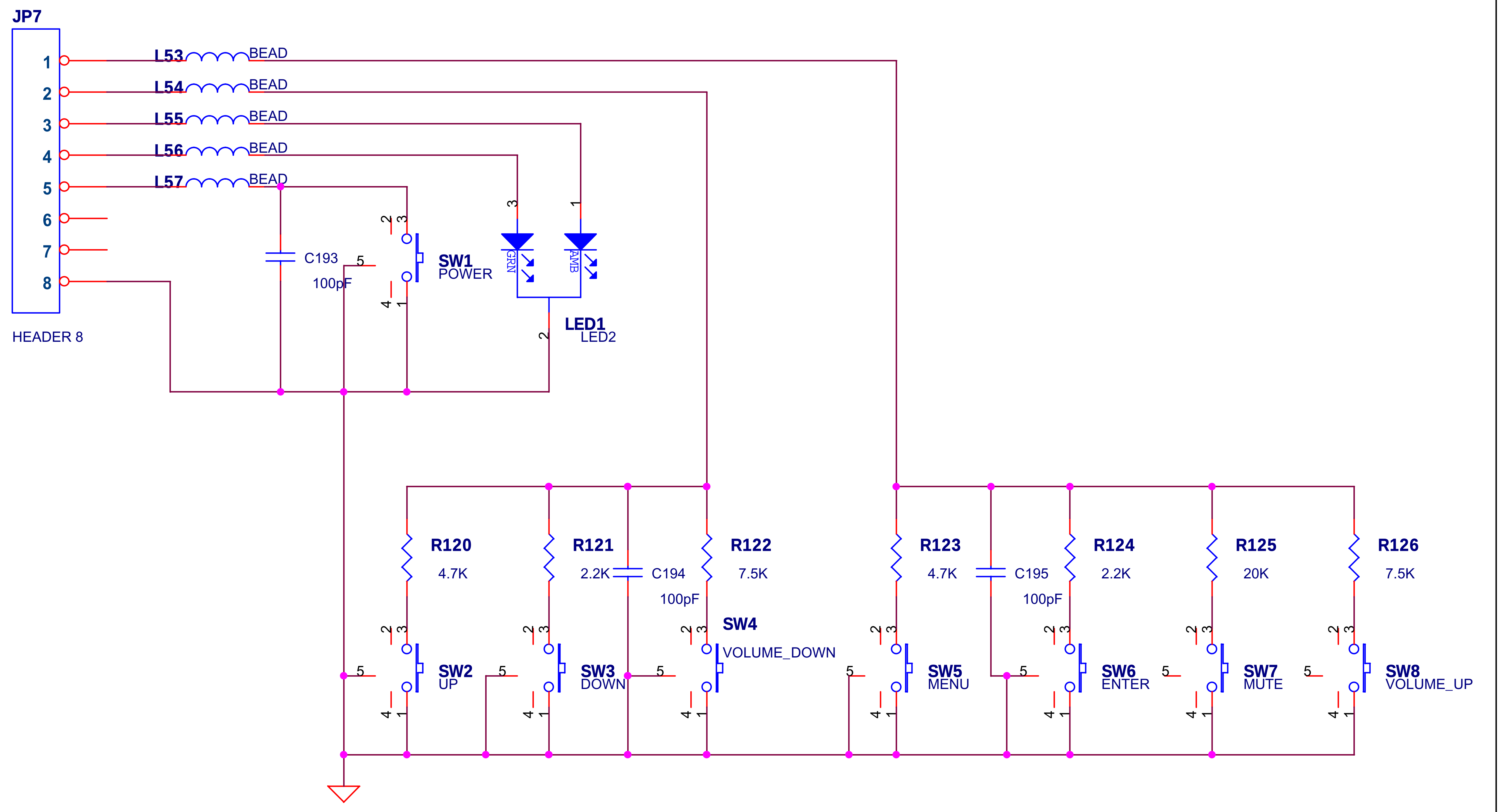
Title: ViewSonic VA930

Size: Custom | Document Number: POWER | Rev: C

Date: Thursday, July 04, 2002 | Sheet | of


W1
DB-15
VGA_SDA
VGA_HS
VGA_VS
VGA_SCL
R_IN
G_IN
B_IN
VGA_CONN
5V_VGA
C161
0.1u
J2
TMDS D2-
TMDS D2+
TMDS D2/4 SH
TMDS D4-
TMDS D4+
DDC CLK
DDC DATA
A_V_SYNC
TMDS D1-
TMDS D1+
TMDS D1/3 SH
TMDS D3-
TMDS D3+
+5V
GND
H_P_DETECT
TMDS D0-
TMDS D0+
TMDS D0/5 SH
TMDS D5-
TMDS D5+
TMDS CLK_SH
TMDS CLK+
TMDS CLK-
A_GND
A_GND
DVI-I connector
RX_D2-
RX_D2+
DDC_SCL
DDC_SDA
RX_D1-
RX_D1+
5V_DDC
R105 4.7k
RX_D0-
RX_D0+
R106 0
R107 0
RX_CLK+
RX_CLK-
JP1
CON8
ADC1
ADC2
AMBER_LED
GREEN_LED
POWER_ON_OFF
L40 BEAD(0805)
L41 BEAD(0805)
L42 BEAD(0805)
L43 BEAD(0805)
L44 BEAD(0805)
C162 0.1u
C163 0.1u
C164 0.1u
C165 0.1u
C166 0.1u
JP4
CON7
12V_AUDIO
MCU_SCL1
MCU_SDA1
AUDIO_MU
HP_SENSE
12V
12V
SCL
SDA
AUDIO_MU
GND
HP_SENSE
JP2
CON6
12V_INVERTER
12V_INVERTER
GND
DIMMING
GND
ON/OFF
L45 BEAD(0805)
L46 BEAD(0805)
12V_INVERTER
BL_ADJUST
BL_ENABLE
C167 NC
C168 NC
JP3
POWER JACK4P
GND
GND
GND
GND
GND
12V
12V
GND_IN
GND_IN
12V_INPUT
GND_INPUT
AI1
AI2
AI3
AI4
AI5
AI-D34
DPWBN5419T8----
BOARD ID: QPWB-5419T8---C
Title
ViewSonic VA930
Size
Custom
Document Number
I/O INTERFACE
Rev
C
Date:
Thursday, July 04, 2002
Sheet
of


U22
LA4635
DC
IN
GND
IN
STBY
P.P
Vcc
OUT
GND
OUT
JP3
AUDIO_L
AUDIO_R
12VB
R108
100K
L47
10UH
R109
1K
C162
470U/16V
C161
470/16V
C158
0.1U
C165
0.1U
R105
2.2
R106
2.2
C163
100u
C164
100
C170
470U/16V
C171
0.1U
JP6
12V
12V
SCL
SDA
Mute
GND
NC
HEADER 6
C169
0.1U
R111
33
R112
33
C172
2.2U/16V
C173
0.1U
C174
0.1U
C175
0.1U
R110
5.6K
C176
2700P
U23
PT2313L
RIN1
LIN1
RIN2
LIN2
RIN3
LIN3
DGND
DADA
CLK
LOUT
LIN
LOUD_L
BOUT_L
BIN_L
TREB_L
LFOUT
RFOUT
LROUT
RROUT
VDD
AGND
REF
ROUT
RIN
LOUD_R
BOUT_R
BIN_R
TREB_R
AV1_R
C177
2.2U/25V
C178
2.2U/25V
R113
10
R114
2.4k
ZD192
3.9V
R192
10K
ZD191
3.9V
R191
10K
R115
1.2K
R116
1.2K
R117
4.7K
R118
4.7K
C179
1.0U/16V
C180
1.0U/16V
L48 BEAD
L49 BEAD
GND_AUDIO
GND_PRE
U24
LM78L09
VIN
VOUT
GND
C160
100U/16V
C187
100U/16V
C188
0.1U
C181
2.2U/16V
C184
22U/16V
C182
0.1U
C185
0.1U
C186
0.1U
R119
5.6K
C183
2700P
J5
PC_Audio
L50 BEAD
L51 BEAD
AV1_R
AV1_L
L52
121A
C189
10P
C190
10P
C191
10P
C192
10P
Title
ViewSonic VA930
Size
B
Document Number
AUDIO
Rev
-
Date: Thursday, July 04, 2002
Sheet
of



Title <Title>		
Size A	Document Number **KEYPAD**	Rev
Date: Thursday, July 04, 2002	Sheet 10 of 10	

10. PCB LAYOUT DIAGRAM

